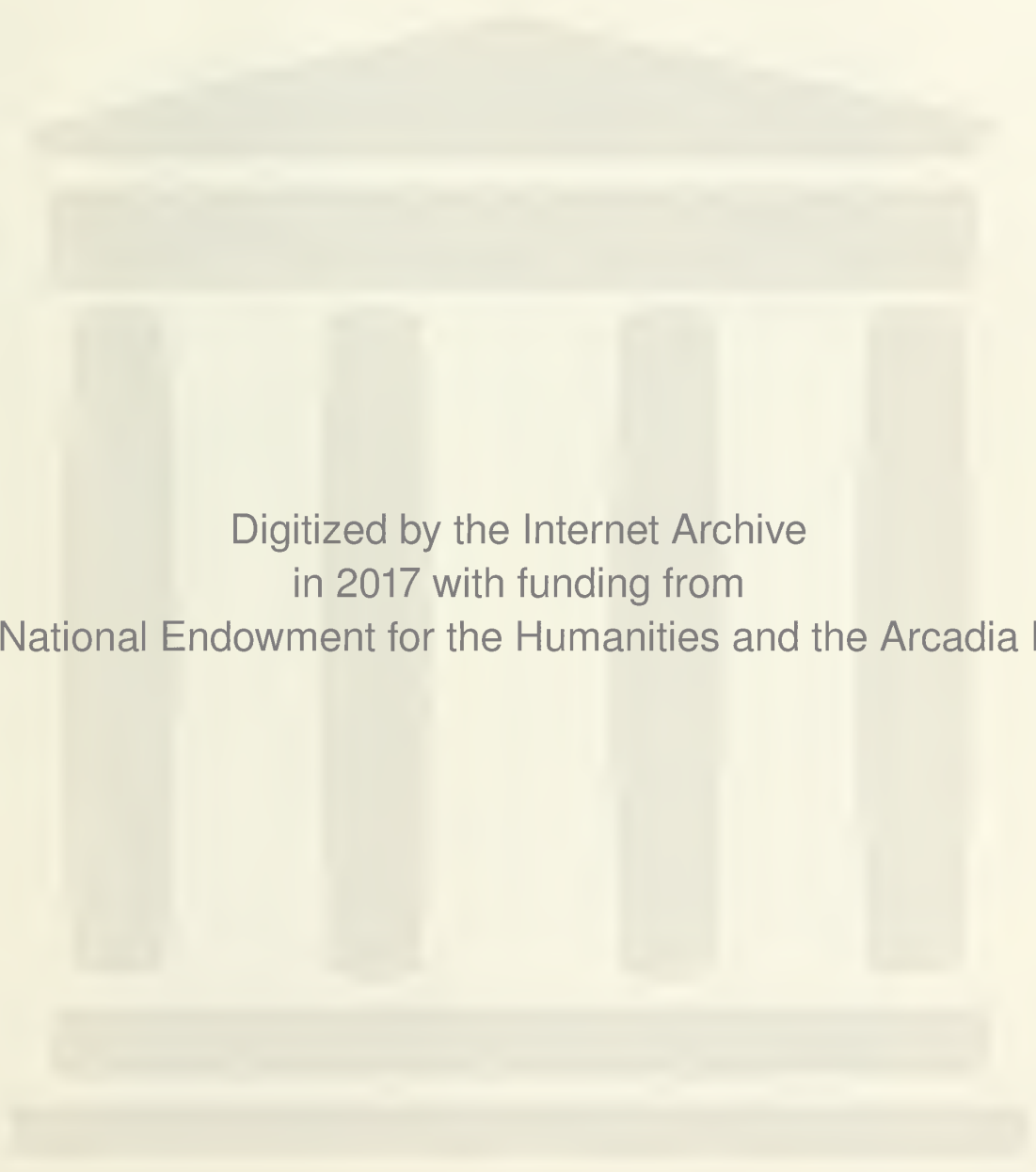


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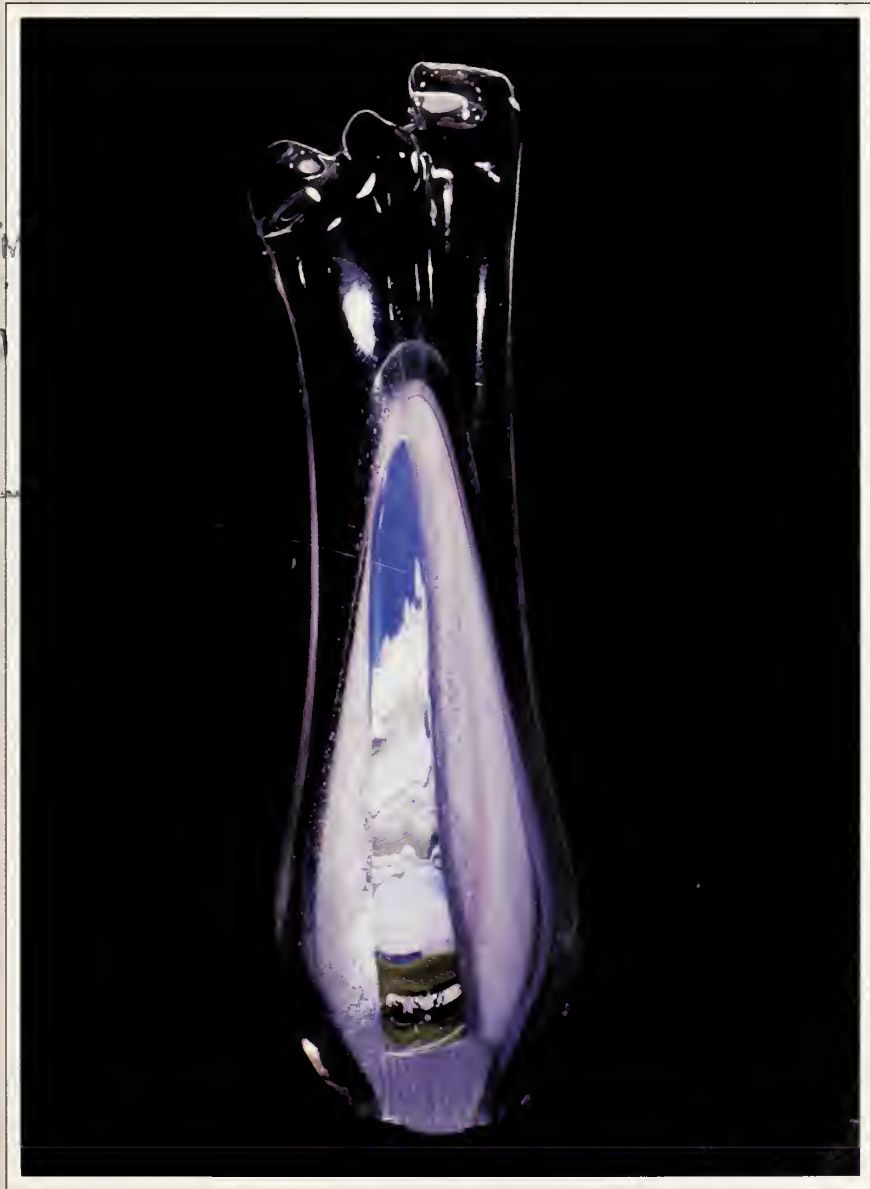
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KANSAS MEDICINE

JOURNAL OF THE KANSAS MEDICAL SOCIETY

Spring 1995

Volume 96, Number 1



First Quarterly Issue.
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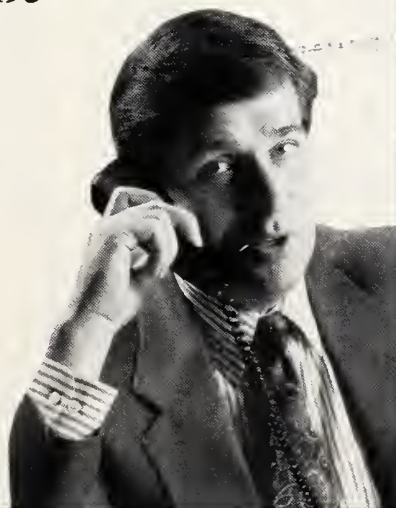
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This issue brings not only a new artist but a new medium to the cover of KANSAS MEDICINE. Vernon Brejcha is the former and blown glass the latter. Visitors to the KMS office late last fall had an opportunity to view two of Brejcha's glass forms, which were on display in the lobby. One large piece (about 18" high), very similar to the cover subject, was placed in an east window, where the morning sun enlivened the many colors embedded inside the clear exterior.

The work on the cover is part of a series called "Posts from the Memory Fenceline," which echo the stone fence posts and the colors found around Holyrood (in central Kansas), where Vernon Brejcha spent his boyhood. He explains the posts this way: "I grew up on a ranch where these posts traversed the landscape. To me they have always been the ideal representation of the clash between civilization and the natural world, between the Native and Western cultures. Fluid glass has been the perfect medium for me in seeking new forms to express the meaning of the posts: the landscapes and atmosphere I infuse into them, and the stories of heritage that I tell through them, for each of them tells a tale."

The stone posts were an innovative response to the lack of trees on the prairie. Early settlers, needing fences, quarried local limestone, cut it into 500-pound posts and drilled holes in them for the wire. Except for an area between Ellsworth and Hays called Post Rock Country, where many still remain, the posts are disappearing from the Kansas landscape.

Originally a painter, Vernon Brejcha fell in love with blown glass when he saw some pieces at a show in Wichita. After mastering the technique himself, he found it the most appropriate medium to express his memories of the western Kansas prairie. Just as a limestone post may evoke thoughts of life on the plains, a glass post may depict different sorts of memories of the same place: the color of the sky on a spring morning, perhaps, the green of new grass sprouting from the dead winter earth, or the clouds that will bring rain.

Vernon Brejcha also makes two other evocative glass forms suggestive of Kansas history: brightly colored peace pipes and highly stylized dippers. Of the pipes he states, "As we are about to enter a new century, the idea of a ceremonial pipe intrigues and inspires me. The concepts of peace and freedom must be kept alive, as much now as ever — if not more so." The glass dippers recall a time when "on the ranch we drank from the well with a dipper; a dipper banged on a pan brought us to our meals from the fields; a dipper was used to break the ice on the kitchen bucket on the bitter winter mornings. . . . Glass has allowed me to explore this basic object and turn it into something both fluid and organic; into a thing of wonder."

The glass creations of Vernon Brejcha are just that: things of wonder. They may be seen in Kansas City, Missouri, at Leopold International gallery in the Savoy Hotel.

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ABOUT OUR LOGO

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laennec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

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The Kansas Foundation for Medical Care is seeking a physician to assume the overall responsibilities for Health Care Quality Improvement Program activities. The individual will serve as a focus for change within the organization and in the provider and practitioner community. The candidate must be board certified in an allopathic or osteopathic specialty and possess strong interpersonal and communications skills. Preference will be given to candidates holding credentials in Epidemiology or Public Health. Candidates should be licensed to practice medicine or surgery in Kansas; or capable of acquiring a Kansas license.

The Kansas Foundation for Medical Care is a physician sponsored organization dedicated to improving the quality of patient care.

Qualified candidates, please submit CVs to: Evelyn Headley, Manager, Human Resources, Kansas Foundation For Medical Care, 2947 SW Wanamaker Drive, Topeka KS 66614, EOE

The Pillars of Medicine, by a Pillar of Medicine

Philippus Aureolus Theophrastus Bombastus von Hohenheim, 1493?-1541, was a physician born in Einsiedeln, Switzerland. As a young man, he gave himself the name by which we have come to know him: Paracelsus. He received his early education from his father, also a physician and chemist. Paracelsus pioneered the application of chemistry to medicine and introduced many drugs, the best known of which was laudanum, the tincture of opium, used in the relief of pain.



An outspoken independent thinker with a healthy ego, Paracelsus brought controversy with him as he traveled through Europe. During a stint in 1526-28 as town physician in Basel, which also required him to teach, he sharply attacked the foundations of ancient and medieval medicine, burning the works of Galen and criticizing the traditional teaching of medicine by textual analysis. "The patients are your textbook," he told his students, "the sickbed is your study." In another break with tradition, he taught in German instead

of Latin and admitted barber surgeons to his lectures. To the dismay of the business community, he refused to prescribe the medicines of the local apothecaries. As if this were not enough, he was a Catholic with tendencies toward the occult, while the rest of northern Europe embraced the Reformation.

Not surprisingly, his views were greeted with opposition by the medical establishment of the day, and he was forced to flee Basel to avoid imprisonment. Still, he did have some remarkable successes as a healer — which led the populace to suspect that he was the infamous Dr. Faustus. But perhaps what accounted for his success was his inclination to reject rote learning, question the reasoning that "we've always done it that way," and to observe the symptoms of his patients and the properties of the herbs he used to treat them.

So, while we pride ourselves on having outgrown the simpleminded adherence to the magic and sorcery of Paracelsus' time, an examination of his principles is still worthwhile. Considering the general ignorance of science and medicine that prevailed in the sixteenth century, the depth of his knowledge and the soundness of his wisdom are surprising.

Some of Paracelsus' theories foreshadowed modern medical practice. He was the first to note the relationship of endemic goiter in the parent and the existence of cretinism in the child. His monograph on miners' diseases contains descriptions of miners' phthisis and the effects of coal gas. Many of his observations, far from reflecting the superstitions of his era, were original and far ahead of his time.

The Pillars of Medicine are statements by Paracelsus that illustrate his feelings about the practice of medicine. Although written centuries ago, they have validity today and can still be of value to those of us who carry the mantle of responsibility for the care of the sick.

TO OUR READERS

This Spring issue of KANSAS MEDICINE is the first published as a quarterly. It is also the first published in 1995, and you may wonder why. As we planned changes to the journal, we also made the decision to rework the *KMS Membership Directory*, and to mail it as a companion to the Spring 1995 journal so that it would qualify under our 2nd class bulk mail permit. Unfortunately, it has taken longer than we expected to complete work on the new directory. We now anticipate mailing it later in the year with another issue of KANSAS MEDICINE.

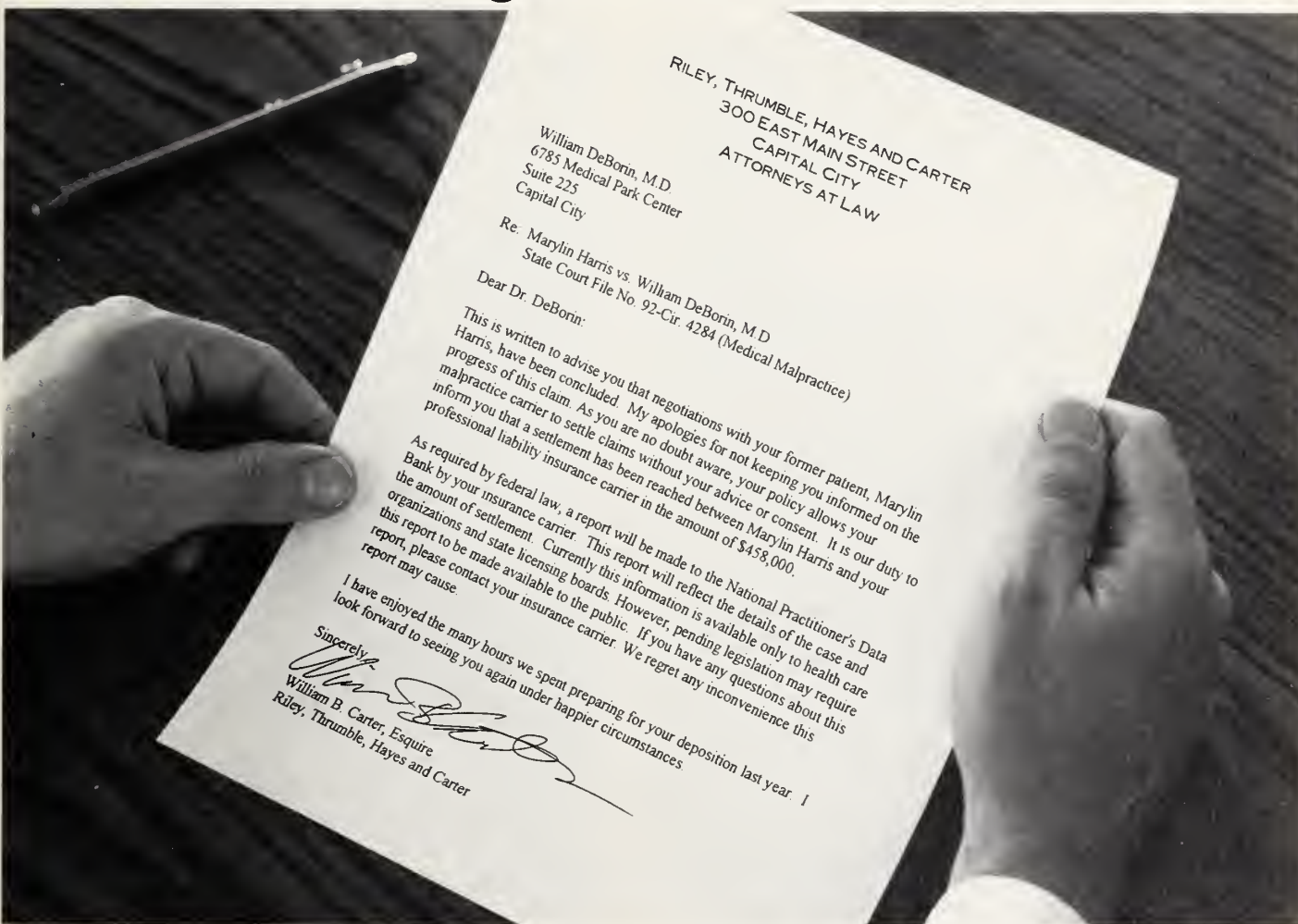
The Summer journal will be published in late August, and the Fall issue will appear, as scheduled, at the end of September. Our Winter publication date is set for the end of December. Thank you for your patience during our "remodeling."

THE PILLARS OF MEDICINE

- He who wants to know a man must look

(Continued on page 7.)

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William DeBorin, M.D.
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Re: Marilyn Harris vs. William DeBorin, M.D.
State Court File No. 92-Cir. 4284 (Medical Malpractice)

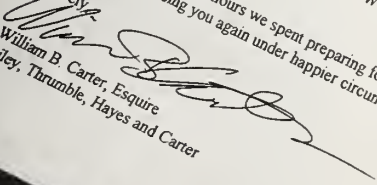
Dear Dr. DeBorin:

This is written to advise you that negotiations with your former patient, Marilyn Harris, have been concluded. My apologies for not keeping you informed on the progress of this claim. As you are no doubt aware, your policy allows your malpractice carrier to settle claims without your advice or consent. It is our duty to inform you that a settlement has been reached between Marilyn Harris and your professional liability insurance carrier in the amount of \$458,000.

As required by federal law, a report will be made to the National Practitioner's Data Bank by your insurance carrier. This report will reflect the details of the case and the amount of settlement. Currently this information is available only to health care organizations and state licensing boards. However, pending legislation may require this report to be made available to the public. If you have any questions about this report, please contact your insurance carrier. We regret any inconvenience this report may cause.

I have enjoyed the many hours we spent preparing for your deposition last year. I look forward to seeing you again under happier circumstances.

Sincerely,


William B. Carter, Esquire
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AMA Interim Meeting

The AMA House of Delegates convened in Honolulu, December 4–7, 1994. The House considered 190 resolutions and 92 Board and Council reports on topics affecting medical practice and the public health of the American people. There were 413 delegates seated.

Managed Care

A Board of Trustees report described current trends in managed care, summarized risks and opportunities for physicians and patients, and presented a detailed AMA strategy for managed care and the private sector.

The House approved the report, emphasizing the following four principles: 1) professionalism — medical science and ethics; 2) patient and physician autonomy; 3) patient and physician rights; and 4) practical assistance to physicians.

The House also adopted a substitute resolution specifically calling on the AMA to undertake or continue the following activities: 1) support, at the federal and state level, the “Patient Protection Act”; 2) identify and publish those cost factors contributing to the escalation of health care costs, with particular attention to patient responsibility and administrative costs; 3) support state and county efforts on behalf of member physicians deselected by managed care plans for other than quality reasons; 4) investigate and publicize the ways managed care can be involved in education, training and research; and 5) evaluate the impact of managed care plans on medical care quality and medical ethics, and identify those practices that adversely affect the delivery of quality health care services.

The House also adopted policies on the following issues: financial incentives, post-operative services, pediatric subspecialists, board certification, residents, medical consensus, patient/physician decision-making, physician contracts and services, patient education, and population-based practices.

Health System Reform

The Board of Trustees submitted a report that presented an update on AMA efforts to advance our health system reform policy and goals. It included recommendations and objectives for

1995. The House adopted as amended the following recommendations:

1) that the AMA continue to vigorously pursue with Congress and the Administration the strengthening of our health care system for the benefit of all patients and physicians by advocating policies that put patients, and the patient/physician relationship, at the forefront;

2) that the AMA seek an incremental approach to health system reform, targeted by patient care needs and guided by a set of priorities that includes, but is not limited to, insurance reform, medical savings accounts, tort reform, antitrust relief, opposition to Medicare and Medicaid cuts, and support for the Patient Protection Act;

3) that the central focus of AMA’s reform campaigns in 1995 be the Patient Protection Act, professional liability reform, insurance reform, medical savings accounts, regulatory reform and physician network/antitrust relief as the most immediate ways to expand patient choice, improve quality and enhance professionalism;

4) that the AMA further increase choice and cost-consciousness by advocating the development of voluntary purchasing groups, a wide variety of choice of plans and, where an employer contributes to health plan costs, a standard dollar contribution toward an employee’s insurance, irrespective of the plan chosen;

5) that the AMA reaffirm the profession’s historic commitment to public health, public service and to providing care to those in need, and that AMA councils search for ways to expand access to care consistent with an incremental reform approach;

6) that the AMA fight for adequate funding for federal health care programs, Medicare and Medicaid in particular; that AMA further advocate for long-term reform of those programs, which insures their effectiveness and fiscal soundness, and against reimbursement reductions which promote cost shifting, diminish access and reduce the quality of care for beneficiaries; and

7) that the AMA reaffirm policy which calls on the AMA to continue to develop and implement the State Health System Reform Action Group (SHRAG) initiative to provide meaningful assis-

tance on state health system reform matters upon their request to state medical societies.

Employer Control of Health Insurance Choices

The Council on Medical Service reported on a study of ways to discourage control of employee health insurance choices by employers. The Council modified several existing AMA policies into a single, concise statement.

McCarran-Ferguson Act

The House amended and adopted a resolution that asks the AMA to call for the repeal of the "insurance industry antitrust exemption" under the McCarran-Ferguson Act and/or pursue other legislative strategies to level the playing field, and to support existing legislative proposals before Congress or seek sponsorship of new legislation which would repeal the "insurance industry antitrust exemption" under the McCarran-Ferguson Act.

State Health System Reform

The House approved a substitute resolution asking the AMA to continue to work with state medical societies, at their request, on state-directed health system reform, to complement our efforts at national health system reform, and encourage and support federal legislation, at the request of state medical societies, including the necessary ERISA, Medicaid, and other federal waivers, to allow those states to implement health system reform at the state level.

Many other issues were considered. If you desire additional information on any of these subjects, please contact one of the delegation members or the KMS office (800-332-0156 or 913-235-2383).

Kermit G. Wedel, M.D.

EDITORIAL COMMENT

(Continued from page 4.)

upon him as a whole and not as a patched-up piece of work. If he finds a part of the human body diseased, he must look for the causes which produce the disease, and not merely treat the external effects. Philosophy — the true perception and understanding of cause and effect — is the mother of the physician. In this understanding rests the indication of the true remedy, and he who is not able to understand will accomplish nothing.

● Nature — not man — is the physician. . . . Try to enable yourself to follow Nature and she will be your instructor. Learn to know the storehouse of Nature and the boxes in which her virtues are stored up. The ways of Nature are simple, and she does not require any complicated prescriptions.

● A physician who is true to his own higher self will also have faith in himself, and he who has that faith will easily command the faith of the people.

● To cure diseases is an *art* which cannot be acquired by the mere reading of books, but which must be learned by experience. Neither emperors nor popes, neither colleges nor schools, can create physicians. They can confer privileges and cause a person who is not a physician to appear as if he were one, but they cannot cause him to be what he is not.

Though the face of medicine is changing rapidly, the observations of Paracelsus and other physicians of the past can provide a link with medicine's long tradition and inspire us on our journey toward the future. W.E.M.

MARK YOUR CALENDAR!
KMS "Women in Medicine" Conference
Wichita
September 29-30, 1995

Legal Issues in Managed Care

WAYNE T. STRATTON, J.D.,* *Topeka*

Tort Litigation

There was a time in which physicians were almost principally responsible for the quality of medical care rendered to a patient. This was best exemplified by a concept called the "Captain of the Ship" doctrine, which was applied in surgery cases. According to this doctrine, a physician was responsible for the acts of the employees of a hospital administering care at the direction of the physician. The logic behind this was that the hospital's employees were effectively lent to the otherwise independent physician.



The health care system is changing, and traditional tort principles of health care delivery are evolving. Physicians are often not independent operating entities. Rather, the hospital, third-party payers and many other entities provide input into the treatment decisions and can overrule, or at least dramatically affect, the decisions a physician makes in providing treatment to a patient. Moreover, these physicians frequently find themselves engaged in practices in which they are no longer an independent entity directing health care, but rather part of an integrated health care delivery system.

As more entities become involved in the intimate details of health care decisions involving patients, those entities simultaneously become responsible to patients, owing them a duty to behave reasonably under the circumstances. A violation of that duty can give rise to liability.

For the most part, the theories that these lawsuits could be based upon are not new to the law,

simply new to the environment of health care. Health care entities' liability may be based simply on the reality of an employer/employee relationship. For example, physicians who work for a staff model HMO may be employed by that HMO. Under those situations, the employer may be held vicariously liable for any acts of malpractice committed by its employee.

Managed care utilization review processes create potential liabilities. Other states' courts have determined that a physician can be held liable if the utilization review process wrongfully denies a course of treatment, and the physician does not become a zealous advocate of the patient's rights. The extent to which the physician has a duty to exhaust appeal rights or take additional steps to assist the patient has not been determined. One court has said:

"The physician who complies without protest with the limitations imposed by a third party payor, when his medical judgment dictates otherwise, cannot avoid his ultimate responsibility for his patient's care. He cannot point to the health care payor as the liability scapegoat when the consequences of his own determinative medical decisions go sour."

In a sense, a physician's potential for liability really has not changed. He or she still owes a responsibility to act as any other reasonably competent practitioner would under similar circumstances. The potential expansion that imposes a duty upon a physician to be an advocate for the patient against an entity's utilization review process has not been determined in Kansas.

ERISA Preemption of State Liability Laws

Many will find it surprising that a patient's health plan may completely shield a health care entity from many forms of liability. This is due to the effect of the Employee Retirement Income Security Act of 1974 (ERISA). In an effort to provide uniformity and consistency in employee retirement or benefit programs, Congress has provided that ERISA supersede any and all state laws insofar as they may relate to any employee benefit plan. This means that claims such as violations of negligence law, wrongful death claims, and other

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603.

forms of professional malpractice which are all based upon state law will not be enforced if the act in question related to the plan's administration.

While these statements may sound clear, and their effect may seem dramatic, courts have tended to apply the concept of ERISA preemption very inconsistently. Even though ERISA preemption is read quite broadly by the courts to include a much larger scope than was ever considered by Congress, it is difficult to predict what the courts will rule in any particular situation. In order to invoke ERISA preemption, the court must determine that a particular action in question "relates to" the employee benefit plan. This determination is often made on the language of the contracts involved, the particular circumstances under which the claim is based, and how closely all of those relate to the administration of the plan.

For example, one health plan was accused of negligently failing to provide treatment for a patient who suffered from inducible ventricular tachycardia and needed formal electrophysiologically guided left ventricular aneurysm resection and subendocardial resection, as well as bypass surgery. There was no local facility to perform this surgery, so the patient was advised to schedule it elsewhere. Because of an administrative breakdown, when the patient arrived for his surgery, he discovered that it had been canceled because his health plan had not pre-approved the procedure. Due to his deteriorating condition, the patient was unable to reschedule the surgery in a sufficient amount of time and died. In that case, the court stated that the decision of whether or not to approve specific procedures directly related to the employee health plan, and all claims, including the widow's claim for infliction of emotional distress, were preempted by ERISA.

ERISA has preempted claims involving the liability of employers under their health care plan. Employer liability may be the clearest case of the type of administration of a plan protected by ERISA preemption. However, employers have been held to be liable for intentional torts relating to failure to follow physicians' advice in requiring employees to return to work. ERISA has also been found to generally preempt the liability of plan administrators and insurers.

As for the individual practitioner, there is less of a likelihood that ERISA would preempt a claim based upon malpractice. However, if the alleged negligent act related to plan administration it too

would be preempted by ERISA. For example, if under the terms of the plan, it is the physician's responsibility to certify or determine whether or not specialized care is needed and should be compensated for under the plan, that decision may well relate to the plan's administration and be preempted by ERISA. This is a situation that can be particularly important when issues arise involving utilization review. A claim based upon the duty of a physician to act as a patient advocate, as mentioned above, could, in theory, be preempted. The physician's liability would depend upon whether that activity related to administration of the plan.

The case law relating to ERISA preemption is still in a very early stage of development. Currently ERISA preempts many broad-based state efforts at health care reform. This is because such a large portion of the health care market falls under ERISA preemption. States which attempt massive health care reform must get a Congressionally granted exception to the ERISA statute. Hawaii was granted such a waiver. In those situations state law would no longer be preempted.

While the state of the law is still sufficiently unsettled to grant any wide degree of certainty for planning purposes, the possibility of ERISA preemption could be an important defense in a claim asserted against a defendant in the health care industry.

Since publication of "Birth-Related Neurological Injury Compensation Programs," in the December column, the following information has been received:

1) The language of the Virginia birth-related neurological injury statute was changed in an effort to characterize cerebral palsy cases more accurately. It now states the infant must be left "permanently motorically disabled," and either "developmentally or cognitively disabled." (*Va. Code Ann.* 38.2-5002D)

2) *Erratum:* The December article was in error where it stated that Virginia's statutory cap on damages had been ruled unconstitutional. It was Florida's cap which had been ruled unconstitutional and became one of the catalysts for their birth-related neurological injury compensation program.

The author would like to thank Mr. Joseph P. McMenamin of McGuire, Woods, Battle & Boothe LLP, Richmond, Virginia, for providing this information.

Emergency Medicine in Kansas: The Last Piece of the Puzzle

JOHN H. JETER, M.D.,* AND DENNIS M. ALLIN, M.D.,† *Kansas City*

When the American College of Emergency Physicians (ACEP) was organized in 1968, it was thought that emergency medicine would be the last major specialty in the United States. So in designing their logo, the ACEP founders used a checkerboard pattern with all the squares filled in save one — the blank square representing emergency medicine. But in Kansas, this square still may be blank after 25 years. Will emergency medicine progress as a specialty here?

The Concept of Emergency Medicine

The concept of the specialty was born in 1961 in Alexandria, Virginia, from a need for service, rather than a need for science. However, the founders realized that their new practice also had potential viability as a specialty. Interest in practicing emergency medicine developed throughout the United States during the 1960s; in just a few years the specialty became a part of many medical communities. Membership in ACEP grew quickly and now numbers over 16,000 members. The first emergency medicine residency program began training emergency physicians in 1970 and was quickly followed by the emergence of programs elsewhere. In 1976, with establishment of the American Board of Emergency Medicine, evaluation development began. The first written and oral board examinations were given in 1980 to emergency physicians who met the board preparation requirements.

Now, with few exceptions, board preparation is attained only through successful completion of an approved emergency medicine residency program. There are approximately 800 residency graduates per year from 101 approved residencies who meet the qualifications to sit for the emer-

gency medicine boards. But while the specialty has developed elsewhere, there is no emergency medicine residency program in Kansas.

In 1989 the American Board of Medical Specialties recognized the American Board of Emergency Medicine as a primary board, thus establishing emergency medicine as a specialty with a unique body of knowledge.

There are now 5,600 emergency departments in the United States and 25,000 emergency physicians. More than 10,500 of these physicians have passed the board examination, including 4,000 who have completed residencies in emergency medicine — most of the rest, excluding recent residency graduates, are without board preparation/eligibility.

Kansas hospitals have only a small emergency medicine pool to provide coverage for their emergency departments. And there are only a few emergency physicians in the state with board certification in their specialty. Excluding metropolitan Kansas City, the shortage of residency-trained and/or board-certified emergency physicians is dramatic, perhaps as striking as can be found in any region. The demographics of Kansas emergency medicine were presented at the University of Kansas School of Medicine's 10-year reunion program in 1991.¹ The study confirmed that residency-trained emergency physicians concentrate in states and areas where residency programs exist, a trend previously identified.² The extreme difficulty in staffing non-urban emergency departments was also observed, especially in those with an emergency patient census below 10,000 per year.

In 1973 an emergency medicine residency began at Kansas City (Missouri) General Hospital, now Truman Medical Center. This program has trained most of the practicing residency-trained emergency physicians in metropolitan Kansas City, including about 20 on the Kansas side. There are no Truman graduates in the remainder of Kansas, nor has Kansas drawn many graduates in emergency medicine from neighboring programs at Denver General Hospital, the University

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of Arkansas, or the University of Oklahoma.

Clearly, emergency medicine in Kansas is suffering growing pains, especially beyond Kansas City. Emergency physicians locally recognize that a residency program affiliated with the University of Kansas School of Medicine is necessary to complete the evolution of the specialty in Kansas.

At their 1993 annual meeting, the Kansas Academy of Family Physicians introduced a resolution opposing the development of an emergency medicine residency in Kansas, voicing a concern that limited resources in primary care might be diverted.³ Though these views are not shared by the entire academy, such discussions within the leadership of family medicine are especially alarming to emergency physicians.

A recent study suggests that true differences do exist in the outcomes of patients treated by emergency medicine board-prepared/certified emergency physicians when compared with non-emergency medicine board-prepared physicians.⁴ In this study by McNamara and Kelly, process evaluation was used to compare two groups of physicians at a single institution when a complete change of staffing occurred. Another issue of paramount importance is cost control. In a 1992 study, McNamara and Kelly show from the same study population that residency-trained emergency physicians provide less expensive care, even while supervising within a residency program.⁵ This is an unusual finding in a university medical center. Both of these studies are important contributions toward understanding the potential of residency training in emergency medicine.

Trott and Blackwell, in their study of academic emergency medicine in United States medical schools, show the recent interest at traditional university institutions in establishing academic programs.⁶ Thirty-eight medical schools currently without academic emergency medicine units responded to their survey with 18% indicating they are currently establishing units, 10% in the planning stages, 40% with institutional support but no current plans, and only 10% having no institutional support or plans for academic emergency medicine.

The emergency medicine training of residents from other primary care specialties may be inferior at institutions without emergency medicine residencies. Medical schools without such programs generally lack residency-trained emergency physicians on their faculties. Chernow et al. studied university institutions without emergency medicine residency programs and found that: only 68%

of medical directors were board-certified in emergency medicine; 20% had no board-certified emergency physicians at all; 75% reported difficulty in recruiting additional emergency physicians; and overall only 50% of the faculty were board-certified in emergency medicine.⁷ In contrast, they found that 80% of the faculty of medical schools with emergency medicine residencies were board-certified, with only 25% reporting difficulty recruiting additional physicians. They found that few institutions without emergency medicine residency programs had formal curricula for the residents or students. The study argues that residents from many specialties may encounter problems in obtaining a quality education during their required rotations or other encounters in the emergency departments of institutions without an emergency medicine residency.

In April of 1994, the Josiah Macy Jr. Foundation met to discuss emergency medicine and its future in the United States. D. Kay Clawson, M.D., former Executive Vice-Chancellor of the University of Kansas School of Medicine in Kansas City, served on the 38-person panel. Briefly, their recommendations are:

- The United States Public Health Service should state as a goal that access to high-quality emergency care should be available to all.

- Federal, state and local governmental organizations, including COGME, should ensure that the number of emergency medicine residency positions is not reduced.

- SAEM (Society of Academic Emergency Medicine), ACEP and the JCAHO should revise the classification of EDs to reflect the level of care available.

- State licensing boards, the National Board of Medical Examiners, the Liaison Committee of Medical Education, and medical schools should ensure that every medical student has acquired the appropriate knowledge to care for emergency patients.

- Medical schools should establish staffed and supported academic departments of emergency medicine.

- ACEP and SAEM should quickly convene a conference to develop a research agenda in emergency medicine and define ways to implement it.⁸

While ACEP and the authors largely agree with these findings, increasing the number of residency slots in some areas seems prudent as certain regions are more underserved than others. In addition, classifying emergency departments to reflect their presumed level of care is controversial and

would possibly engender unnecessary negative public perception, especially in non-urban or underserved urban EDs.

Also, in April 1994, the National Highway Traffic Safety Administration (NHTSA) Technical Assistance Team visited Kansas to provide an evaluation of the Kansas statewide EMS program. They provided 10 recommendations covering regulation and policy, resource management, human resources and training, transportation, facilities, communications, public information and education, medical direction, trauma systems, and evaluation. They noted that medical direction in particular is lacking, and they observed the "shortage of full-time emergency physicians across the state, [limiting] the ability of services to recruit MAs [medical advisors] primarily involved in emergency care." They also identified a disparity between urban and rural MAs to involve themselves in areas of training, on-line medical control, and quality issues.⁹

The benefits of an emergency medicine residency program in Kansas should be apparent. Consider the usefulness of an academic center to train emergency medicine residents, provide continuing medical education to the emergency physicians of the state, give toxicologic guidance and leadership in the development of a certified regional poison control center to be utilized by

all Kansas physicians, serve as an academic source for political issues (e.g., trauma systems, prehospital care), and provide an arena for the education of primary care residents, medical students, and other physicians needing training in emergency medicine. A program affiliated with the University of Kansas School of Medicine could train six to eight emergency residents per year. Although some would choose to practice in Kansas, the residency program would not fill our state's needs for emergency physicians for some time, perhaps five to ten years. Initially, however, even a few emergency medicine-trained physicians, who would choose to function as directors of emergency departments in smaller communities (i.e., greater than 20,000 people), would have a profound and immediate impact on the quality of emergency care delivered in that region.

Is emergency medicine still a blank square in Kansas? The absence of an academic program suggests the affirmative. We deserve the best possible care for our citizens, and completing the house of medicine is imperative. More traditional medical schools and unrepresented states are beginning the development of new academic programs in emergency medicine. Kansas, too, should choose to participate.

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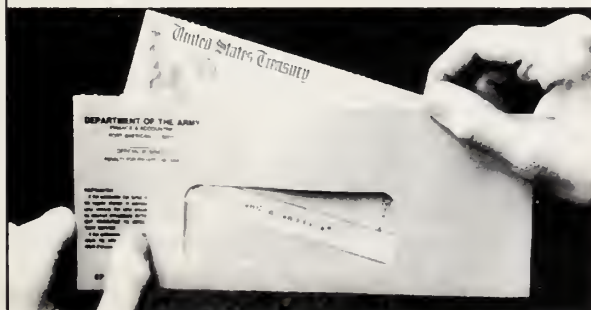
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Complications of Laparoscopic Cholecystectomy

MICHAEL S. WOODS, M.D., GILBERT S. SANTOSCOY, M.D.,
JOHN L. SHELLITO, M.D., AND ERIC A. SODER, M.D.,* *Wichita*

Laparoscopic cholecystectomy (LC) was rapidly incorporated into general surgical practice before prospective randomized trials could be performed to validate the technique as safe and effective as open cholecystectomy (OC). This phenomenon was driven by the public's desire for less "invasive" operative approaches, as well as by entrepreneurial interests. LC is now the operation of choice for symptomatic cholelithiasis and, despite these shortcomings, has proved to be an excellent procedure. The incidence of LC-related biliary complications, however, seems to exceed the number of biliary complications that occurred with OC.¹

These alarming but well recognized problems are briefly reviewed herein, with recommendations concerning the prevention, intraoperative and postoperative detection of injuries, and subsequent treatment of LC-related biliary tract injuries. Information for this article was extracted from the literature and the experience of treating physicians referred to our clinic, where a cooperative, multi-specialty approach to these patients using radiology, gastroenterology and surgery has produced excellent results.

Incidence of Injury and Classification

The incidence of iatrogenic biliary tract injury in OC is widely accepted to be between 0.1 and 0.25%,^{2,3} while the incidence of injury during LC is variably reported from 0 to 7%,⁴⁻⁶ and may be as high as 4% in LC for acute cholelithiasis.⁷ This noteworthy increase prompts critical review of surgical techniques.

A multi-institutional study⁸ examined 81 injuries and grouped them as cystic duct leaks, ductal leaks/strictures, and transection/excision injuries. Cystic duct leaks are commonly manifested in the postoperative period as a biloma, and leak-

age is often documented by endoscopic retrograde cholangiopancreatography (ERCP) or reoperation. This category was included, as it seems to occur more commonly in the era of LC and often requires active intervention. Ductal leaks and/or strictures are defined by radiographic means, either percutaneous transhepatic cholangiography (PTC) or ERCP. Non-transecting incisions in bile ducts are usually recognized by intraoperative cholangiography (IOC), with no proximal flow of dye and/or dye extravasation, and were placed in this category. Early strictures are commonly due to clips, while late strictures can occur secondary to ischemia, cautery injury to the bile duct, or periductal inflammation from a bile leak. Transections are defined as a complete transection of the bile duct, and excisions as removal of a section of the bile duct. These were placed in the same category, as both are effectively a transecting injury, and treatment is often similar. The term conversion means that the LC was terminated, and the procedure completed as an open case during the same anesthesia.

Injury Prevention

Careful identification of anatomy is the most important variable in the prevention of LC-related biliary tract injury. There are three factors involved in injury prevention: proper dissection technique, detection through routine use of intraoperative cholangiography (IOC), and a low threshold for conversion.

Dissection technique. Dissection should be done with the assistance of a 30° laparoscope. This allows one to look down upon the region of dissection instead of "head-on" with the 0° scope, giving better visualization of the region of the common bile duct. Retraction of the fundus should be cephalad, with the infundibulum pulled inferiorly and laterally to "splay out" the triangle of Calot. Dissection should begin high on the gallbladder and progress toward the triangle of Calot. This allows one to follow the gallbladder

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wall to the infundibulum and cystic duct, where circumferential mobilization of the cystic duct can be accomplished. All peritoneal folds should be taken down — so-called pedunculation of the gallbladder. Electrocautery should not be used unless the tip of the cautery device can be visualized (e.g., through the peritoneum). No structure should be burned, divided or clipped until the anatomy is defined. We recommend routine IOC, with visualization of the entire ductal system. IOC findings should be documented. The cystic duct is then clipped and divided after elucidating the anatomy, and the gallbladder dissected from the liver bed.

Detection: Intraoperative

Intraoperative detection of an injury is critical, as morbidity and mortality of biliary injuries are related to the length of time from injury to its detection. The best method of intraoperative detection is the use of IOC, which has been demonstrated to prevent injuries and extension of minor injuries into complete transections; and to detect injuries intraoperatively, leading to conversion. It is associated with fewer days to injury detection (due to conversion), decreases the severity of injury, and is associated with fewer operations to correct injuries after LC.⁸ Some suggest that inability to obtain an IOC is an indication for conversion. IOC will not prevent or detect all injuries, so careful dissection remains tantamount. Obviously, if the injury occurs after the IOC it will not be identified by IOC. Additionally, cystic duct leaks may not be detected by IOC, as these injuries may be related to traction on the cystic duct, resulting in a small tear at the cystic duct and common hepatic duct junction. This leak may be occluded during IOC by the clip or cholangiogram clamp, thereby going unrecognized. If there are questions about the anatomy or dissection, the case should be converted.

Detection: Postoperative

Postoperative evaluation after LC should be considered in any patient not having a totally uneventful postoperative course. Nausea, vomiting, abdominal distention, fevers, anorexia or pain may indicate a problem. Patients with injuries often have some identifiable problem in the first 24 hours. Four modalities are of use in detecting injuries postoperatively: cholescintigraphy, ERCP, PTC and CT scans. Cholescintigraphy can identify a bile leak, but will not always identify where it comes from anatomically. ERCP can

identify a biliary leak or stricture and can serve a therapeutic role as well (discussed later). PTC is useful mainly in cases of late stricture when the intrahepatic biliary ducts are dilated, can be used to identify the level of stricture, and can also serve a therapeutic function. CT scan can identify perihepatic fluid collections and biliary dilation, but is limited in its ability to identify the actual lesion.

Treatment

Conversion to an open case is the goal after a biliary injury is identified, since morbidity is less the sooner it is treated. Extrahepatic bile collections should be drained percutaneously (or by laparotomy if the patient requires open surgery) to prevent an infected biloma, bile peritonitis or ascites. This can be done in conjunction with any of the following treatments, which are discussed by individual injury groups.

Cystic Duct Leaks/Major Leaks. Major leaks may respond to transpapillary stenting, but can require laparotomy with repair over a t-tube. If the leak is not repaired, bile ascites, peritonitis or an infected biloma may result. The ensuing bile-induced periductal inflammation can result in a stricture from compression of the duct. In this case, an endoscopic stent can be placed which may allow the inflammation to resolve. There is some evidence that these patients' strictures will resolve as the inflammation resolves. Early operation in these cases may be fraught with potential complications, and may be unnecessary as long as adequate drainage can be obtained endoscopically. Other strictures may respond to balloon dilation and stents. Postoperative balloon dilation and stenting has equal success to surgical repair (83%) in selected patients and requires repeat treatment every four months over one year. Percutaneous radiologic methods are successful, too, but are more uncomfortable for the patient. Occasionally, combined radiologic and endoscopic methods are required for successful stent placement across tight strictures. If non-surgical methods for strictures fail, operation is required. Most strictures will require a biliary-enteric anastomosis, usually a hepaticojejunostomy (HJ), which also has good long-term results (83%).

Transection/Excision Injuries. Primary repair of complete ductal transections can be done over a t-tube if discovered intraoperatively or in the early postoperative period before inflammation becomes severe. For surgeons uncomfortable in the techniques of biliary-enteric anastomoses, this is a good option. It may eventually be the preferred

initial repair, but long-term follow-up of patients having primary repairs is not available. If a stricture occurs in the primary repair, endoscopic salvage with balloon dilation and stenting may avoid reoperation and HJ, although HJ will be required in many of these patients. Late discovery of a transection/excision injury usually requires a HJ, as inflammation from bile extravasation often prevents successful primary anastomosis. Long-term success (i.e., good result) with HJ is high (83%).¹⁰

Conclusions

Injury prevention can be optimized by careful dissection and routine use of an IOC. IOC will prevent some injuries and, importantly, will detect most injuries occurring during early dissection. Early detection is critical to minimize morbidity and mortality and to enhance the chance of successful treatment of biliary injuries. Postoperative fever, chills, nausea, pain, vomiting, distention or anorexia should raise the suspicion of an injury, especially if it occurs in the first 24 hours. Not all injuries require operation, as all simple cystic duct leaks and some ductal bile leaks will resolve with endoscopic stenting. Many bile duct strictures can be treated with balloon dilation and stenting initially. If this fails, biliary-enteric anastomosis has an equally good long-term outcome, and can be used to salvage the patient. Transection/excision injuries may be successfully repaired by end-to-end anastomosis over a t-tube if discovered early. Endoscopic salvage is possible in some patients who develop late strictures. HJ can be used to salvage failed primary repairs or as the initial treatment method for transection/excision injuries. A cooperative multispecialty approach using radiology, gastroenterology and surgery optimizes results.

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SALMONELLA

(Continued from page 17.)

Paola were identical, providing additional evidence that a common source of infection was responsible for this outbreak.

Infection with *Salmonella* may occur by consuming raw or undercooked eggs, meats, poultry, and unpasteurized milk. Domestic animals may also transmit *Salmonella* to humans. *Salmonella* is transmitted between individuals by the fecal-oral route. Physicians treating patients suspected of a *Salmonella* infection are encouraged to submit stool specimens for culture. Positive specimens should be sent to KDHE for serotyping. Salmonellosis is normally a self-limited disease. Antibiotic treatment is usually not indicated for patients with uncomplicated gastroenteritis caused by *Salmonella* because treatment does not decrease the duration of the illness and can prolong the duration of excretion of the organism.

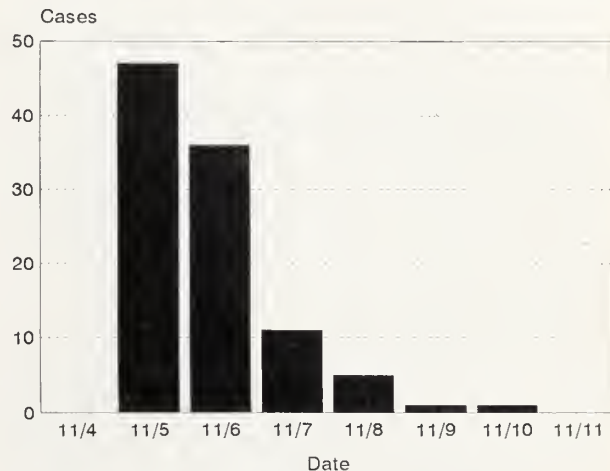
Salmonella Outbreak at a High School in Kansas, 1994

On November 7, 1994, the Kansas Department of Health and Environment (KDHE) was informed by a county health department that a number of children at the local high school were suffering from diarrhea, nausea, vomiting and fever. One child had been hospitalized for dehydration. Students started becoming sick on Saturday, November 5, at a football game. An outbreak investigation by KDHE was begun on November 10.

Questionnaires were administered to all individuals in school and mailed to students who were sick at home. A case was defined as any student or staff member of the high school who had at least three loose or watery stools within a 24-hour period on or after November 5. Stool specimens were sent to KDHE for culturing. Positive stool specimens tested at private laboratories were referred to KDHE for serotyping. A subset of the positive specimens were sent from KDHE to the Centers for Disease Control and Prevention for phage typing. A second questionnaire, listing the foods served for lunch by the school on November 3-4, was administered to those present at school and a random sample of controls taken from individuals who were not sick.

There were 104 cases at the school, representing 17% of the students and staff. The outbreak lasted from November 5 through November 10, with the majority of the cases on November 5-6. All cases reported diarrhea, 95 (91%) had stomach cramps, 91 (88%) had headache, 78 (75%) had fever, 69 (66%) had nausea, 38 (37%) had vomiting, and 16 (15%) had bloody stool. Thirty-one (30%) of these individuals saw a physician, and 4 (4%) were hospitalized. Duration of illness ranged from one to nine days, with a median duration of four days. The incubation time, clinical presentation, and duration of illness were compatible with infection with *Salmonella*. Sixteen (15%) of the cases were culture-confirmed as *Salmonella enteritidis*. All isolates tested were phage type eight.

Reported by: J. A. M. Calder, D.V.M., M.P.H., Ph.D., Epidemiology Section, Bureau of Disease Control, Kansas Department of Health and Environment.



Date of onset of illness during a Salmonella outbreak at a high school in Kansas, November, 1994.

In 93% of the cases, individuals reported eating the school lunch on Friday, compared to 69% of controls. There was a statistically significant association between illness and eating the school lunch on Friday ($p=0.0004$). There was a strong association between consumption of beef and noodles served on Friday and illness (odds ratio=11.5, 95% confidence limits 5.0, 27.0).

The cafeteria at the high school prepared the meals for all schools in the district. The same meals were served at each school. No illnesses were reported at any of the other schools. This suggests that contamination may have occurred at the high school after preparation. No serious violations of food handling techniques or food safety codes were found in the cafeteria. All of the food items submitted for testing and stool samples obtained from the 20 food handlers were negative for *S. enteritidis*.

Salmonellosis is the most commonly reported foodborne illness. There were 408 cases of *Salmonella* reported in Kansas during 1994. *S. enteritidis* is the second-most-common serotype for *Salmonella* in Kansas, accounting for approximately 14% of all *Salmonella* isolates tested. The results of the phage typing indicated that the *S. enteritidis* isolates obtained from different patients in

(Continued on page 16.)

Physical Activity in Kansas, 1993

There is substantial evidence of the health benefits of physical activity. Regular physical activity can help to reduce the risk of cardiovascular disease, which in Kansas accounted for 33% of deaths in 1993.¹ It can also be beneficial in preventing or controlling hypertension, diabetes mellitus, osteoporosis, obesity and some mental health problems.² Even light activity, below the level recommended for cardiorespiratory fitness, has been shown to decrease the risk of coronary heart disease.³

The Behavioral Risk Factor Surveillance System (BRFSS) survey, a random-digit-dialed telephone survey, is conducted by the Kansas Department of Health and Environment annually. Information about leisure-time physical activity was collected from 1,440 Kansans in 1993.

Figure 1 summarizes how Kansas stands in relation to the national physical activity objectives for the year 2000, as outlined by the U.S. Department of Health and Human Services. Based on the survey results, an estimated 62% of Kansans engaged in some leisure-time physical activity in the month prior to being surveyed. This is more than 20 percentage points below the national goal of 85% for the year 2000.² This estimate did not differ by sex, but did decrease with age, with 78% of those from 18 to 24 years of age and 50% of those 65 or older reporting some leisure-time physical activity. Only 39% of those with less than a high-school diploma reported any leisure-time physical activity, compared to 72% of college graduates.

Eighteen percent of Kansans engaged in regular leisure-time physical activities, defined as at least five times a week for at least 30 minutes a session, prior to being surveyed. The year 2000 objective is to increase this to at least 30%.² Men and women were equally likely to report regular physical activity, while those aged 18 to 24 years were most likely to report regular physical activity (26%). The percentage of persons reporting regular physical activity increased with education level

from 9% of those without a high school diploma to 23% of those with a college degree.

Only 7% of Kansans exercise three or more times a week for 20 minutes or more at sufficient intensity to develop and maintain cardiorespiratory fitness. The percentage of Kansans participating in regular and vigorous leisure-time physical activity needs to be almost tripled to reach the year 2000 objective of 20%.²

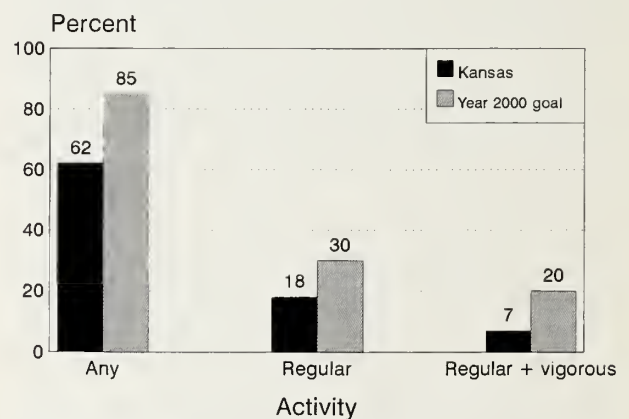


Figure 1. Leisure-time physical activity: Kansas, 1993.

Figure 2 illustrates how reported physical activity varied by the month in which the survey was completed. While the percentage of Kansans reporting no leisure-time physical activity remained relatively stable from month to month, the percentage of Kansans reporting regular leisure-time physical activity appeared to follow a seasonal trend. Kansans were least likely to report regular activity during the winter months, with only 9% reporting regular activity in February, compared to 26% in July. However, even in July, the national goal of 30% was not attained.

The promotion of physical activity needs to continue in order to reduce the risk of some of the most common and serious health problems in Kansas, and to improve the overall quality of life of the state's residents. While all groups should be encouraged to engage in some sort of regular leisure-time physical activity, those of lower socioeconomic status and the elderly may have the most to gain. These two groups report less activity, but shoulder a disproportionate

Reported by L. Wilberschied, M.S., Epidemiology Section, Bureau of Disease Control, Kansas Department of Health and Environment; and K. Pippert, Bureau of Chronic Disease and Health Promotion, Kansas Department of Health and Environment.

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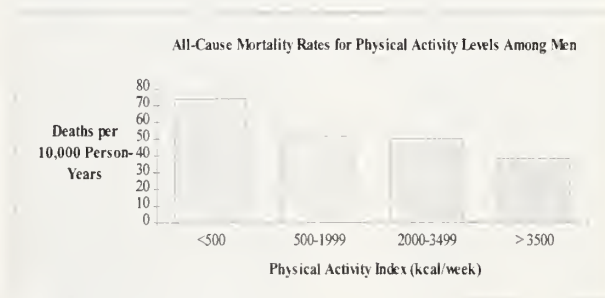
The Value of Counseling Patients about Exercise

BRAD T. STEINLE, M.S.Ed.,* *Kansas City*

Regular physical activity has been promoted as a necessary and important component of health promotion and disease prevention, and counseling in this area should be an essential part of preventive services offered by health care providers.¹ Recently the American Heart Association declared that low physical fitness is as important a risk factor for coronary heart disease as smoking, hypercholesterolemia and hypertension.² For this review, we will present evidence of the health benefits derived from regular physical activity and physical fitness, and give some guidelines to help counsel patients about exercise.

First it is important to differentiate among physical fitness, physical activity and exercise. *Physical fitness* is a quantifiable measure of one's ability to perform physical work. This is usually measured clinically through the use of graded exercise testing. *Physical activity* is any body movement that results in an energy expenditure above resting metabolic level. *Exercise* is a subcategory of physical activity that is a planned, repetitive activity that results in improved fitness. Improved physical fitness is the result of an increased ability to use oxygen to derive energy for physical work.

High physical activity and high physical fitness levels appear to have beneficial effects in reducing mortality from all causes of death and particularly coronary heart disease. Paffenbarger has followed over 10,000 Harvard alumni males since the early 1960s and has found that those who maintained moderately vigorous physical activity have lower rates of death from all causes.³ Blair found lower mortality rates in those patients with higher physical fitness levels in an eight-year follow-up study of 10,224 men and 3,120 women.⁴ The decreased mortality rates were primarily due to lowered rates of cardiovascular diseases and cancer. Sandvik found that physical fitness appears to be a graded, independent long-term predictor of



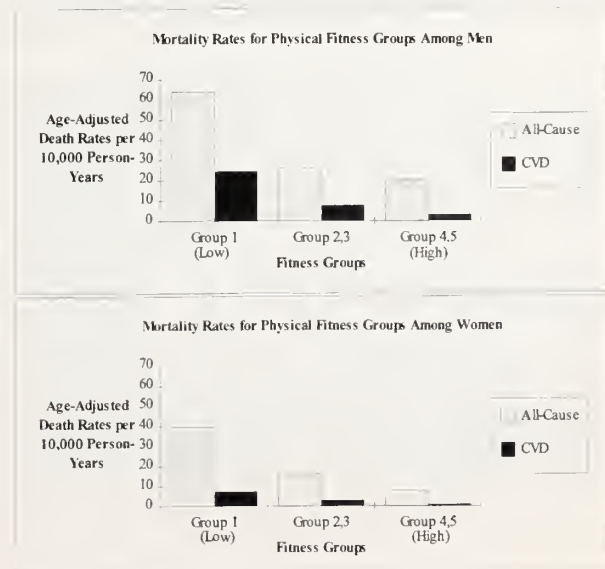
Modified from Paffenbarger and others.(3)

Figure 1.

mortality from cardiovascular causes in healthy, middle-aged men.⁵

It is likely that regular exercise offers protection against coronary heart disease by favorably modifying serum lipoprotein concentrations and through weight reduction.⁶ Observational studies have shown favorable associations between high-density lipoprotein (HDL) cholesterol and regular exercise.⁷ Weight loss, primarily through the loss of body fat, either by dieting or exercise, produces comparable and favorable changes in serum lipoprotein levels.⁸

In patients with documented coronary heart



Modified from Blair and others.(4)

Figure 2.

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disease, regular exercise clearly improves functional work capacity and leads to lowered heart rate and systolic blood pressure at submaximal exertion levels.⁹ The product of heart rate and systolic blood pressure (an index of myocardial oxygen consumption) is lowered, thus reducing myocardial oxygen demands.

Healthy individuals can exercise safely if they are counseled appropriately. Persons with major risk factors for coronary heart disease or documented disease should be evaluated by a physician prior to initiating an exercise program. When counseling patients about exercise, it is important to give specific recommendations.

- First, identify an activity that is both enjoyable and convenient for the patient. Walking, running, swimming, stair-climbing, cycling, cross-country skiing and roller-blading are effective types of exercise. Brisk walking is often the most convenient activity, with little cost other than a good pair of walking shoes and requiring only a safe walking area.²

- Be specific about the quantity of exercise needed for health benefits. The American College of Sports Medicine recommends exercise three to four days each week for 30 minutes per session.¹⁰ To judge exercise intensity, patients can be taught to monitor radial or carotid pulse rates. For healthy adults, an exercise heart rate range should be determined by calculating 50 to 80% of predicted maximal heart rate ($MHR = 220 - \text{age}$). Most people can exercise comfortably and safely within this range. Alternatively, patients can be instructed to exercise vigorously until they are unable to speak more than six to eight words without taking a breath between words.

- Patients should start out gradually. Obese and extremely sedentary patients should begin with exercise periods of only five to ten minutes, and then add two to three minutes to their workout each week.

- Other forms of physical activity, such as gardening, cutting wood or lawn mowing can substitute for an exercise workout.

- Stretching for five minutes before and after a workout will help prevent soreness and improve flexibility.

- During office visits, inquire about patients' exercise programs and reinforce their exercise. Finally, warn patients about abnormal responses to exercise. Excessive shortness of breath, extreme fatigue, muscle soreness and nausea are signs of overexertion. Patients who experience chest pain during exercise should immediately stop their ex-

TABLE 1.
RECOMMENDATIONS FOR EXERCISE

1. Exercise on 3 to 4 days per week.
 2. Exercise for 30 to 40 minutes per session.
 3. Maintain exercise heart rate range between 50 and 80% of maximal heart rate.
 4. Build endurance gradually, especially in obese and sedentary patients.
 5. Be sure to warm up and cool down for 5 to 10 minutes.
 6. Choose an exercise that is endurance-oriented and appropriate for the patient; e.g., walking, swimming, cycling, etc.
-

ercise and contact their physician or emergency medical system. While adverse effects from exercise, such as cardiac arrests, do occur, these events are exceedingly rare. The overwhelming majority of patients can exercise without problems if they are given appropriate recommendations.¹ The cost-benefit ratio strongly favors using exercise as part of a routine set of recommendations for preventive practice — when proper and specific guidelines are given by the physician.

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An Unusual Case of Hydronephrosis

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A 59-year-old female reported right flank pain and hematuria. The patient had a history of heart disease, had a prosthetic mitral valve, and was taking Coumadin. Her prothrombin time (PT) was 44 seconds (normal: 11.5 to 13.0).

Imaging Findings

Intravenous pyelogram (IVP) showed a slight delay in excretion on the right, with mild hydronephrosis involving primarily the upper pole collecting system. There was no dilatation of the right ureter (figure 1), nor was there an intraluminal filling defect, such as a ureteral calculus, to account for the upper collecting system hydronephrosis. The left renal collecting system showed no abnormality. The IVP finding suggested a mass in the caudal aspect of the right renal sinus. Abdominal CT showed a pathologic process in the renal sinus, surrounding the right upper collecting system (figure 2). The mass extended around the proximal right ureter (figure 3). A subsequent retrograde pyelogram did not show an intraluminal mass within the right renal pelvis, nor evidence of invasion by an extrinsic mass of the right upper collecting system.

Discussion

The most common cause of flank pain and hematuria is nephroureterolithiasis. This patient did not have the imaging findings of a renal calculus. The obstruction in this patient was due to a non-invasive process surrounding the renal pelvis and proximal ureter. The PT of 44 seconds and the history, combined with images which did not demonstrate an invasive neoplastic process, led to a diagnosis of renal sinus hemorrhage. The patient was treated conservatively.



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Craniopharyngioma Presenting as Korsakoff Psychosis

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AND PAUL O'BOYNICK, M.D.,* *Kansas City*

A 53-year-old white male sought treatment for the chief complaint of worsening deficits of short-term and recent memory, increasing confabulation, and confusion. The patient also gave a one-year history of progressive fatigue, decreased sexual function, polydipsia and polyuria. He occasionally used alcohol and was on a nonsteroidal anti-inflammatory medication for degenerative arthritis at the time of admission.

Physical examination revealed a mildly obese white male who was oriented only to person but not to time or space and had significant defects in recent and short-term memory. His attention span was very short and he was able to recall only one digit of a seven-digit retention test. He also exhibited an inferior bitemporal quadrantanopsia.

His laboratory findings were significant for serum cortisol level of 2.1 mcg/dl compatible with hypopituitarism, and T4 of 5.1 mcg/dl (borderline). Testosterone level was less than 10 mcg/dl and serum prolactin level 27.8 ng/ml.

Magnetic resonance imaging (MRI) showed a large (4 cm x 4.5 cm x 4.2 cm) inhomogeneous enhancing suprasellar mass extending into the hypothalamus and to the foramina of Monro. There was associated moderate hydrocephalus (figure 1).

Operation

A right frontotemporal craniotomy was performed. Upon opening the lamina terminalis a large bulbous mass with a solid and a cystic component was found posterior to the chiasm. The cyst fluid was green and oily, typical for craniopharyngioma. The tumor was resected using microsurgery techniques. A gross total removal was

obtained with no residual tumor seen beneath the optic chiasm or tracts.

Pathology

Permanent sections of the specimen showed interface between the advancing margins of a craniopharyngioma and the overlying brain. The tumor processes were composed of squamous and peripheral basaloid epithelial cells. There were no histologic signs of malignancy. The neighboring brain tissue showed absence of neurons, gliosis by pilocytic astrocytes and mild lymphocytic infiltration (figure 2).

Following surgery the patient showed significant improvement in recent and short-term memory. His postoperative course was complicated only by diabetes insipidus, which was treated with DDAVP (desmopressin acetate). His visual field

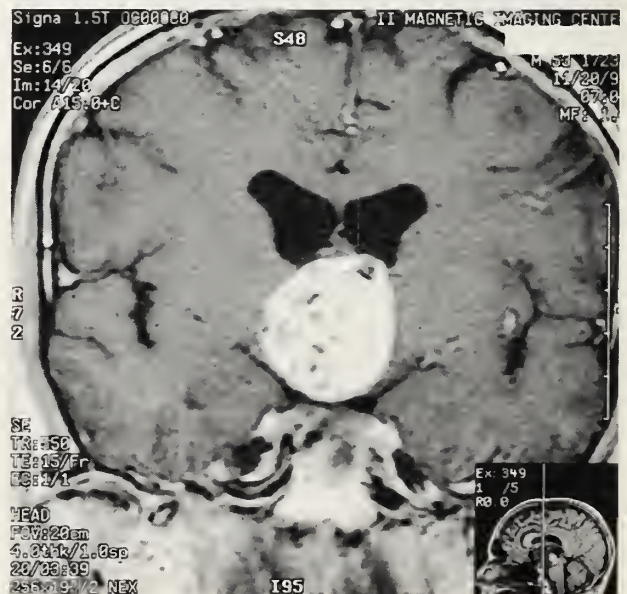


Figure 1. Coronal view of magnetic resonance imaging shows a 4 cm x 2 cm inhomogeneous enhancing suprasellar mass extending into the hypothalamus and to the foramina of Monro. There is an associated moderate hydrocephalus.

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The authors wish to thank Mrs. Anita Graham for the careful typing of the manuscript.

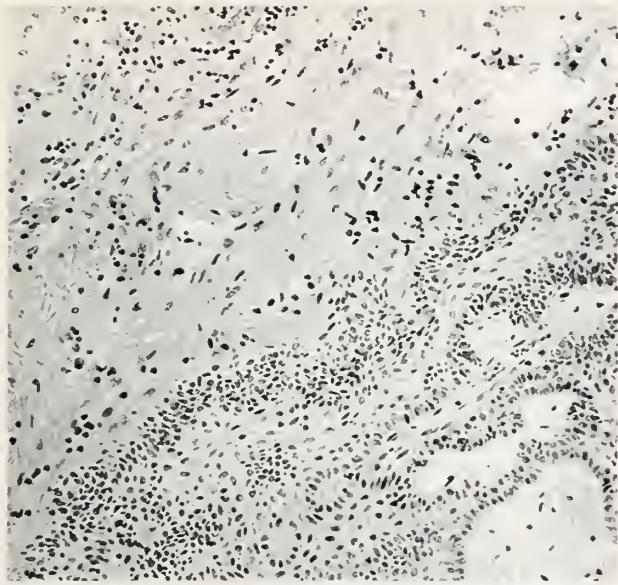


Figure 2. Interface between advancing margin of craniopharyngioma and overlying brain. The tumor processes are composed of squamous and peripheral basaloid epithelial cells. The brain tissue shows absence of neurons, gliosis by pilocytic astrocytes and mild lymphocytic infiltration. Hematoxylin eosin X140.

deficits subsequently resolved as observed on an outpatient basis.

Comment

The Korsakoff syndrome (amnesic syndrome) is usually associated with Wernicke disease and as such is most often seen in alcoholic and malnourished patients who suffer from thiamine deficiency. Adams and Victor¹ even went so far as to suggest that "Korsakoff psychosis is the psychic manifestation of Wernicke disease." These authors nevertheless pointed out that Korsakoff psychosis may have its basis in various lesions of the diencephalon.

It has been indeed well documented that memory disturbances (amnesic syndrome) are associated with lesions of the dorsomedial thalamus, mammillary bodies, and terminal aspect of the fornices.^{2,3} It has also been shown that the midline diencephalic structures and the hippocampus are important areas involved in learning and memory.⁴ Memory deficits can also result from tumors involving the floor and walls of the third ventricle,^{5,6,7} including cases of pituitary adenomas.⁸ Even without formal psychological testing, all these authors were able to document some improvement in recent and remote memory following resection of the mass.

In 1976 Ignelzi⁹ reported a case of anterograde and retrograde amnesia associated with a large cystic craniopharyngioma involving the floor of the third ventricle. Following percutaneous aspiration marked improvement of both types of memory deficits was observed. General features of dementia without specific memory loss in patients with craniopharyngioma appear to have a higher incidence in the elderly.¹⁰ The Korsakoff syndrome seems to be a much rarer presenting symptom in craniopharyngiomas of adults. Craniopharyngiomas are epithelial neoplasms believed to develop from remnants of Rathke's pouch. Since the latter evolves from the roof of the primitive stomodeum (oral cavity), rather than from the pharynx, the name is actually a misnomer, but as Russell and Rubinstein¹¹ pointed out, this objection is academic, since the name is widely used and likely to persist. Since Rathke's pouch grows from *below* to reach the future sella turcica, it is also difficult to explain why craniopharyngiomas typically develop *above* the sella. It is perhaps customary to think of this neoplasm as one involving young people and indeed more than half are observed in childhood and adolescence. They may even be found in the newborn. But they also occur in adults up to the seventh decade and Russell and Rubinstein actually observed a second peak of incidence in the fourth and fifth decades.

Conclusion

We conclude that patients presenting with Korsakoff psychosis or a variant of that syndrome, should have a vigilant workup to include a thorough history, physical examination and an MRI or CT scan of the head. Such an approach can result in the early detection of craniopharyngiomas. It may also show that the association of this lesion with Korsakoff psychosis is not an uncommon one.

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(Continued on page 34.)

The Impact of Age-Related Visual Impairment on Functional Independence in the Elderly

DANIEL L. SWAGERTY JR., M.D.,* *Kansas City*

A 75-year-old man sought medical care at our clinic with the chief complaint of frequent falls. He denied loss of consciousness, dizziness or problems with gait. The falls consistently occurred while stepping up onto steps and curbs. He often seemed to catch his foot but had sustained no injuries. His past medical history was unremarkable except for hypertension, which was controlled with hydrochlorothiazide. He had worn glasses since childhood. His last prescription change was five years prior. Further questioning revealed significant problems with reading, watching television, cooking, dressing and some aspects of his personal care. He had come to rely greatly on his wife over the past year for many of his activities. He also had become much less active.

On physical examination, his blood pressure was 146/78 in the lying position and 140/76 when he stood. His blood pressure was essentially the same in the left arm. His general medical examination revealed an occasional skipped heart beat and a completely normal neurological examination. Gait and hearing evaluations were normal. Electrocardiogram revealed rare premature atrial contractions. Laboratory studies were unremarkable, including a normal two-hour-postprandial blood glucose and sedimentation rate. A thorough ophthalmologic evaluation detected immature anterior cortical cataracts and nonexudative (dry) macular degeneration in both eyes. There was significant central vision loss in both eyes. His peripheral visual fields and intraocular pressure were normal bilaterally. Despite careful lens adjustment, the ophthalmologist could not improve this patient's visual acuity to better than

20/180 for the left eye and 20/80 for the right eye.

Discussion

The frequent falls and declining function experienced by this gentleman clearly demonstrate the profound health consequences of impaired vision for the elderly. Visual impairment is a common problem; more than 90% of older persons require eyeglasses. Greater than 20% of those over the age of 85 report that, even with the aid of glasses, they have a great deal of difficulty seeing. Of the 500,000 individuals who are legally blind in this country, 50% are older than 65 years of age. The prevalence of blindness rises sharply with age to 3,000 of every 100,000 persons 85 years or older. Legal blindness is defined as corrected vision in the better eye of 20/200 or poorer, or vision that is restricted to less than 20 in its widest diameter. For the elderly, the leading causes of blindness are senile cataracts, macular degeneration, glaucoma and diabetic retinopathy. New cases of blindness in the aged are primarily due to macular degeneration. Visually impaired persons are those who have some trouble seeing with one or both eyes, even when wearing corrective lenses, but they do not fit the definition of legal blindness. Of the more than 11 million persons in this country who are visually impaired, greater than 40% are older than 65 years of age. Cataracts and glaucoma are the leading causes of new cases of visual impairment in the elderly.

Macular degeneration will be the primary pathologic visual process discussed in this review. The other three major eye disorders in the elderly (glaucoma, senile cataracts and diabetic retinopathy) will be reviewed in later case discussions. The prevalence of age-related macular degeneration is 20% for persons living in the community who are 75 years or older. Although the exact pathogenesis of this disorder is not known, it seems to be associated with degenerative changes in the reti-

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nal pigmented epithelium (RPE). Primary degeneration of the RPE or a metabolic disturbance between the RPE and overlying photoreceptor cells may be the first event in the pathogenesis of macular degeneration. The result is hyaline material accumulation within the RPE, loss of photoreceptors and, in more severe forms, neovascularization with exudate formation in the affected areas of the retina. Since this process occurs in the macula, the area of the retina responsible for high-resolution visual acuity, even a small lesion can lead to a severe loss of vision.

Clinically, this disorder can be divided into nonexudative (dry) and exudative (wet) macular degeneration. Fortunately, 80 to 90% of macular degeneration is nonexudative, which is associated with a gradual loss of central vision. Only 10% of these patients develop impaired vision to the extent of legal blindness. Thus, the patient in this case had more severe degeneration than is typical. Exudative macular degeneration is much more likely to be associated with severe visual loss. Choroidal neovascularization is the primary destructive mechanism in this form of macular degeneration.

Treatment

Older persons with macular degeneration often have associated cataracts. In patients with both disorders, the benefits of cataract surgery depend on the severity of the macular degeneration. Surgery is not beneficial if the macular degeneration impairs vision as much or more than the cataracts. In this case, the visual loss was largely due to macular degeneration, so surgery for the cataracts was not indicated. This individual has significantly more impaired vision in one eye than the other. The resulting loss of stereoscopic vision and depth perception places him at much greater risk for a fall.

Though no specific treatment for nonexudative macular degeneration is available, a recent double-blinded, randomized, controlled trial of oral zinc did suggest that this nutrient might be effective in slowing the progression of visual loss. Otherwise, medical management of this form of macular degeneration relies primarily on monitoring for choroidal neovascularization, retinal detachments, and greater visual loss. Several clinical symptoms that indicate the development of these pathologic changes include sudden or recent central visual loss, blurred vision, distortion, or a new scotoma (blind spot). Patients with nonexudative macular degeneration can also be offered low-

vision rehabilitation, as described below.

Argon laser photocoagulation can be beneficial for patients with exudative macular degeneration. A recent study showed that one year after laser therapy, visual acuity was preserved in approximately 50% of treated patients. In comparison, severe visual loss occurred in 43% of the untreated patients and 21% of the treated patients. However, the prevalence of severe visual loss increased to nearly half of the treated patients within three years, predominantly due to neovascularizations growing toward the center of the fovea. Thus, photocoagulation is best regarded as postponing, rather than preventing, severe visual loss in patients with choroidal neovascularization.

Adequate lighting is one of the keys to improving vision in the elderly with impaired sight, but precautions must be taken to avoid glare. Filters, visors and sun glasses that remove shorter wavelengths may be helpful. Reading glasses with convex lenses that add from 4 to 50 diopters of lens power are the most commonly prescribed low-vision aid for the elderly. Above 10 diopters, the preservation of binocular vision is usually very difficult. The visual goal then becomes monocular correction for the better eye. Hand-held and stand magnifiers can be prescribed, but provide benefits only for simple tasks conducted at a distance of about an arm's length. Video and computer magnifiers can be very helpful, but are limited in use by their high cost and lack of portability. In addition to magnification, referral to an occupational therapist can be of great benefit. A therapist can help adapt tasks that require vision and can provide aids such as large-print reading material, large-button telephones, felt-tip pens for writing, talking watches and clocks, and raised-dot markings for oven dials.

Despite limitations in biomedical interventions for this gentleman, his function improved after being referred to an occupational therapist with special expertise in low-vision rehabilitation. He regained independence in performing his own personal care by relying on touch, use of dressing and personal hygiene aids, and a magnification lens for his right eye. The monocular correction in particular enabled him to resume reading. Several environmental modifications in the patient's home provided more independence and greatly reduced the incidence of falls. First, yellow tape was applied to the top edge of each step to provide much greater contrast on his stairs. Pathways were also generally cleared of environmental hazards.

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Summary

Low vision is an extremely common problem in the elderly, which may have devastating consequences for functional independence and health status. It ranks only behind arthritis and heart disease as the etiology for impaired function in those over the age of 70. Macular degeneration is a leading cause of blindness and poor vision in the elderly. The central vision loss of this disorder can sometimes be postponed through laser therapy. Otherwise, the low visual state is best addressed with vision-enhancing devices, non-optical adaptive equipment, and patient education available through most occupational therapists. Referral to a low-vision rehabilitation program is sometimes needed for more comprehensive evaluation and intervention. Individual adaptation and supportive services often result in a significant improvement in function and quality of life for those elders with low vision.

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Geriatrics Journal Club

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Pressure Sores and Pressure-reducing Mattresses: Controlled Clinical Trial. Hofman A, Geelkerken RH, Wille J, Hamming JJ, Hermans J, Breslau PJ. *Lancet* 1994;343:568-71.

This is a randomized, controlled study of a pressure-reducing mattress (DeCube, made by Comfortex in the United States), compared with a standard hospital mattress, in preventing pressure sores in patients at high risk. The study was performed on an orthopedic surgery service in the Netherlands. Eligible patients had been admitted for a femoral neck fracture, did not have a pressure ulcer on admission, and had a pressure sore risk score predicting a 70% likelihood of developing a sore within two weeks. Both groups were treated according to a standard protocol. Neither staff caring for the patient nor the study investigators were blinded to the type of bed.

Forty-four patients were enrolled, 23 on the standard mattress and 21 on the DeCube. The average age was 84. Six patients were men, and 38 were women. There were no significant differences between groups in fracture site, surgical treatment, pressure sore risk index, hemoglobin or nutritional parameters.

Results

The trial was stopped early, due to significant differences between groups at an interim analysis. The primary end-point was the development of Stage 2, 3 or 4 pressure ulcers. At one week after surgery, 5 of 20 patients (25%) on the DeCube had pressure ulcers, and 14 of 22 patients (64%) on the standard mattress had pressure ulcers. At two weeks, 4 of 17 patients on the DeCube (24%) and 13 of 19 on the standard mattress (68%) had significant pressure ulcers. Differences in pressure ulcer occurrence between the two groups was statistically significant at both times.

Comments

This study does not involve the very expensive

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air-fluidized beds (Clinitron) or low-air-loss beds (Ken-Air and others), which are probably only appropriate for treating existing pressure ulcers that have not responded to less expensive measures. The DeCube uses removable foam blocks under a special mattress cover to reduce the pressure under bony prominences. There are several mattresses on the U.S. market now that claim significant pressure reduction under bony prominences. These mattresses also appear to reduce sheer forces when turning patients. What has been lacking is objective data on the ability of the newer mattresses to reduce the incidence of new pressure sores, or to speed healing of existing sores. My own institution is undergoing a simple comparison of three of these new pressure-reducing mattresses. The DeCube is one, and we share the authors' concern about the difficulty in setting up the bed for each patient. Its use is probably best recommended to orthopedic and neurology services, and perhaps the intensive care unit, where the likelihood of new pressure sores is high, and staff can be trained to fine-tune the beds.

How to Change Your Practice

For patients who are admitted to the hospital with very impaired mobility (e.g., new leg fractures, strokes, delirium), immediate placement on a pressure-reducing mattress should reduce the risk of new ulcers. You will need to find out from your nursing staff what brand they feel most comfortable in setting up for their patients.

If an area in your hospital is having problems with pressure ulcers, recommend replacing all the mattresses in that area with pressure-reducing mattresses. Pressure-reducing mattresses cost about \$250 to \$400 each. With the cost of a single pressure sore estimated at \$10,000 to \$30,000, the mattresses could quickly pay for themselves.

Hypertension

I also recommend a recent review article on hypertension in the elderly: National High Blood Pressure Education Program Working Group Report on Hypertension in the Elderly. *Hypertension* 1994;23:275-85. The recommendations are practical and up-to-date.

Neurology in Frontier America before Mitchell: Fort Scott Records

SATY SATYA-MURTI, M.D.,* *Parsons*

"Historical knowledge . . . prevents us (from) committing the ingenuous mistakes of other times. But if . . . you have lost the memory of the past, and do not profit by experience, then everything turns to disadvantage. The most 'cultured' people to-day are suffering from incredible ignorance of history."

José Ortega y Gasset, 1930

Abstract

The American Civil War and Weir Mitchell were instrumental in the birth of American clinical neurology. Before this period, medical practice in frontier America was undisciplined and inchoate. In these times, Fort Scott, a federal military outpost in what was then Indian territory (now Kansas), maintained an active hospital. At this fort, meticulously kept records between the years of 1842 and 1853 have been preserved. These records reveal that military surgeons of that day were aware of several neurological illnesses, such as post-traumatic epilepsy, cephalalgia, meningitis and delirium tremens. There are autopsy descriptions of cerebral hemorrhage and meningitis. The fort surgeons used thermometry routinely, at least before autopsy, even though clinical thermometer usage was very uncommon until the late 1860s. The Fort Scott records provide insight into the prevailing clinical beliefs of the day. They also reveal that some knowledge of neurology was extant before Mitchell, even in frontier America.

The American Civil War (1861–65) provided abundant material for the study of gunshot wounds to the brain and peripheral nerves. Weir

Mitchell, William Hammond, George Morehouse and William Keen took an abiding interest in the study of these cases.† Their toils resulted in the recognition of causalgia and other consequences of nerve injuries. Thus, credit for the birth of American clinical neurology belongs to these late-19th-century pioneers.

In the years preceding the Civil War, medicine was hardly a scientific discipline. Fort Scott was founded in the 1840s, when the pre-microbial era still prevailed. Miasma, rather than microbes, took the blame for infections. Surgery was practiced on unanesthetized or under-anesthetized patients. Ungloved hands performed surgery, if and when needed.^{1,2} Antisepsis was practiced more in breach than in observance. Such 18th-century procedures as blistering, bleeding, leeching and cupping carried high therapeutic merits.³ Measuring body temperature was considered a redundant and worthless exercise. X-rays were not even a pale glint on the horizon. The accompanying time line shows some events of general and medical interest that took place in the years before the Civil War. During these "darkest . . . bleak" years, only those "... too stupid for the bar, [or] too immoral for the Pulpit chose to study medicine."¹ Kansas was yet to attain statehood. In the frontier territories, not all early physicians had "culture and education."⁴ Many practiced under hazardous circumstances. Under such conditions, systematic documentation and study of any disease would have been extraordinary. Thus, it was surprising to find well

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Author's acknowledgments: I express deep gratitude to Fort Scott historians Arnold Schofield and Alan Chilton. Their help and friendship have been vital for this paper. I am indebted to Susan Case of Clendening History of Medicine Library, at The University of Kansas Medical Center, for providing me enthusiasm and access to rare books.

†These Civil War-era physicians published extensively on the consequences of gunshot wounds and nerve trauma, thus establishing themselves as pioneers of American neurology. It was Mitchell who coined the term causalgia.

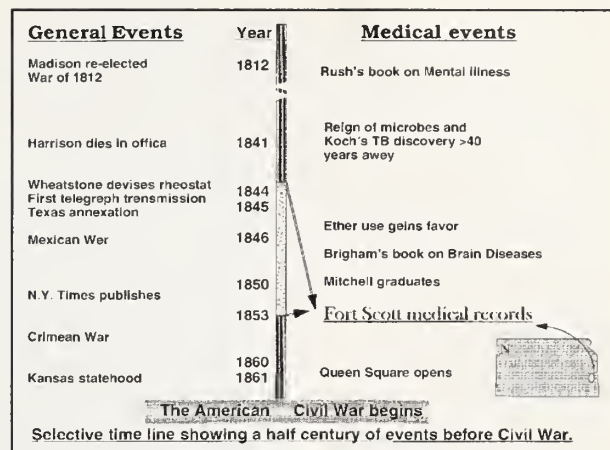
kept medical records from a federal outpost which was established 150 years ago in what was then known simply as the frontier and later as Kansas Territory. In this paper I describe some of my findings, relevant to neurology, from a study of these records.

The Fort

Fort Scott was established in 1842 with the intention of keeping peace among the intermingling Indian tribes and white squatters. The fort was part of a permanent Indian frontier marking the boundary of Euro-American settlement. It stretched south from Fort Leavenworth to Fort Towson on the Red River. A military road connected these forts. The U.S. Dragoons, organized in 1833 as an elite mounted regiment, were stationed at the fort. They patrolled the surrounding territories and escorted trader caravans. The fort closed in 1853, only to reopen during the Civil War. Army surgeons working at this and other posts were required to submit medical reports and detailed meteorological data to the Army Medical Department. Meticulous quarterly reports, from the Assistant Surgeons of the fort to the Surgeon General of the U.S. Army, included a register of diseases treated, and discharge and autopsy notes. Microfilmed medical records from the pre-Civil War period of 1842 to 1853 are still available at Fort Scott. Today the fort is a National Historic Site which maintains a restored period hospital and other related facilities.

The Records

Between 1842 and 1853, there was a total of 4,221 patient visits for medical attention. This author, with the help of the Fort Scott staff, examined hand-written quarterly reports of this period. In addition to mere entries of diseases diagnosed, there are instances describing symptoms, signs and treatment offered. Of the 4,221 visits, 401 patients were registered as being "sick or convalescent" at the post hospital. Slightly more than half the visits were for fevers, diarrhea and respiratory infections. Malaria was a common cause of fever. Fevers were divided into at least six categories. Often each fever category was considered a diagnosis by itself. In the etiology of fevers and diarrhea, rainy weather and miasma from decaying organic matter were held to be the culprits. Headache and delirium tremens were the commonest neurological diagnoses. Other common diagnoses were neuralgia, epilepsy and apoplexy. Less frequent conditions were vertigo,



meningitis, partial paralysis, mental imbecility and mania. A case of frontal gunshot wound healed spontaneously, but left the patient with a "tremble" and a "predisposition to epilepsy." Three cases of epilepsy, including the one above, and two cases of "Mental" derangement or imbecility were discharged from active duty. Deaths occurred from gunshot wounds (2), stab wound to brain (1), meningitis and brain congestion (3), apoplexy (2) and hypothermia (2). Alcohol-related causes led the list, with 6 deaths. No cases of chorea, tetanus and cerebral concussion were seen, although these diagnoses were listed. Autopsy descriptions from 10 cases included an examination of the brain in four. The brain was congested and swollen in two cases of meningitis. Blood and brain parenchyma extruded in one case each of apoplexy and traumatic hemorrhage. Microscopes, although invented, had not found a wide application in analysis of human brain tissues.⁵ Thus, tissue examination of the brain from these cases was not available. The table lists the frequencies of neurological diagnoses.

Discussion

I describe below some striking examples of medical beliefs and practice from those days. In the 18th century there was an elaborate trend in classifying diseases by genera, species and varieties.⁶ This system, a rueful attempt at applying taxonomy to medicine, merely succeeded in classifying symptoms rather than diseases. Scientists in the early 19th century had just succeeded in abandoning this short-lived, burdensome system. Yet its suffocating influence lingered in attempts at classifying fevers according to their temporal fluctuation. Each fever pattern was considered to represent a disease, *sui generis*. This belief remained, even though clinical thermometry was not yet in

NEUROLOGIC DIAGNOSES FOR YEARS 1842-53
AT FORT SCOTT

<i>All sick & Convalescent</i>	401	%
Cephalalgia	57	14.0
D. T.	26	6.5
Neuralgia	9	2.2
Epilepsy	8	2.0
Apoplexy	4	1.0
Vertigo	2	0.5
Mania	2	0.5
Meningitis	2	0.5
Partial Paralysis	2	0.5
Total neurologic cases	112	27.7

practice. Only after 1867, when Edouard Seguin and Austin Flint published a series of articles on the use of thermometers, did thermometry become a measure of a person's vital signs.⁷ Medical practice without thermometry was equated to "theurgism" (literally, God's work, or magic) by Seguin. Only a few years before that, however, use of a thermometer was felt to be a "sissy" practice.⁴

In most autopsied cases, regardless of the cause of death, the Fort's assistant surgeons made a clear note of the body temperature before dissection. Thus, some 25 years before Seguin, in Fort Scott the value of body temperature, at least in death, had been recognized. (Edouard Seguin's son, Edward, we should note, later became a founding member of The American Neurological Association and a Professor of Neurology at Columbia University.)

Cephalalgia was the most common neurological diagnosis (14%) among the sick at Fort Scott, a situation comparable to contemporary practice. The military physicians considered cephalalgia "... doubtless owing to simple gastric derangements."⁸ This belief implied that a gastric disturbance caused headaches. Today, we might consider migrainous gastric paresis as a consequence, rather than a cause, of headache. "Intemperance" due to alcohol caused delirium tremens, the second most common neurological diagnosis (6.5%). Alcohol excess predisposed the dragoons and infantry soldiers to other illnesses, especially hypothermia in winter. Meningitis was ascribed to intemperance and exposure to extreme heat. Drug addiction, to follow after the Civil War, was much less common in the 1840s. Epilepsy occurred in seven cases. Epilepsy, imbecility and mental illness resulted in discharge from the ser-

vice, as would be the case today.

The following case description is of interest. In late 1849, a corporal sustained a "Fracture of Os Frontis caused by the bursting of a shotgun — a fragment of the barrel penetrating the brain — much loss of medullary matter" resulted. "Several fragments of bone extracted at various times — the wound healed entirely, but left the patient ... with a predisposition to Epilepsy." (See figure.) This case is, arguably, one of the early descriptions of post-traumatic epilepsy before the Civil War. It implies that the post surgeons had recognized a cause-and-effect relationship between brain trauma and epilepsy. By the end of the Civil War, such knowledge was commonplace. In a review of Civil War head injuries, Kaufman described 14 survivors of perforating head injuries; most others died quickly.⁹ Thus, the above case of the corporal is notable not only for his survival but also for the residual post-traumatic epilepsy.

Detailed gross descriptions of autopsied heart, lungs and viscera described the cause of death in 10 cases. Brain autopsies merely described congestion, hemorrhage and brain extruding "... in an unusual quantity from the cut surface." The last description, from a fatal case of "apoplexy" might have denoted cerebral edema. These descriptions, although inadequate by contemporary standards, still speak well of the physician of that day.

Medical terminology was much less anglicized in those days. Cephalalgia, odontalgia (toothache) and phthisis pulmonalis (pulmonary tuberculosis), terms of yore, are still recognizable today. One group of terms, however, defied any contemporary understanding initially; one of them was *Vulnus Sclopeticum*. Under the category of "vulnus" there were such entries as vulnus incisum and sclopeticum. In one case, vulnus sclopeticum resulted in the sad death of an officer. After consulting the *Oxford English Dictionary* and the Civil War forum of CompuServe, it became clear that vulnus sclopeticum referred to a bullet wound. A wound was called a vulnus. "Sclopeticum" is a derivation from "sclopette," which is a culverin, an early and crude handgun. Use of such terms lingered even until the late 1860s. Later, perhaps the banality of the detested minie ball "gunshot wound" gradually replaced fanciful terms such as vulnus sclopeticum.

The primacy of Weir Mitchell in the development of American neurology remains unquestioned.^{5,10} Even before Mitchell, however, neuro-

5.	
Died.	REMARKS.
	<p>Caused by the bursting of a shot gun - a fragment of the barrel penetrating the brain - Much loss of brain matter - Several fragments of bone extracted at various times - The wound healed entirely, but left the patient <u>paralytic & tremor</u>, with a predisposition to <u>Epilepsy</u> -</p>

The case report of a corporal who sustained a frontal gunshot wound. The wound healed, but left the patient with "epilepsy." This is part of a quarterly report of "Discharges and Deaths." The patient was discharged from service on November 12, 1849.

logic conditions had been recognized by such pioneers as Benjamin Rush, James Jackson and Amariah Brigham in the early 19th century. DeJong referred to Amariah Brigham (1798-1849) and his treatise on neurological illnesses.¹⁰ In an 1840 publication, Brigham discussed apoplexy, epilepsy and delirium tremens. These predecessors of Mitchell and William Hammond practiced in large East Coast cities. Kansas was still unrecognized Indian territory, known only as the frontier, and yet to attain statehood. Its doctors "... were treating the victims of the passion and hatred engendered by the slavery quarrel."⁴ The Kansas doctor, even some 20 years later, drew very uncomplimentary remarks about his dress, education and manners. The spread of medical knowledge was necessarily slow, and even telegraphic transmission was just a tentative experiment in 1844. Only the military physicians were obligated to keep detailed medical and meteorological records. Otherwise, record-keeping and documentation, two overwhelming contemporary concerns, were neither expected nor required of physicians at large. Thus, there was a striking chasm between the status of "hinterland" frontier medicine and the cutting edge of coastal medical thinking. Set against this backdrop, Fort Scott's assistant surgeons seemed to have practiced a superior caliber of medicine. Their records exhibit an awareness of current advances of that day, including a knowledge of several neurological diagnoses. Joseph Barnes was an assistant surgeon at the fort in the early 1850s. His report, from Fort Scott,

on the health of the Middle Division under his command waxes proudly on the salubrious state of his troops.⁸ In 1864, he replaced Hammond as Surgeon General. Thus, there is little wonder that the military milieu became the incubating medium for the birth of American neurology in later years.

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A Medical School, A Medical Tool, and Some Medical Jewels

In this issue of *KANSAS MEDICINE*, we revive a column not seen in the journal for some years. In it, we aim to call to the attention of Kansas physicians books they may not have heard about, but will want to read.

As the Editor of *JAMA* wrote in 1895, "The guiding principle of a dignified medical journal is that the reviewer and editor shall tell his readers the truth about a book sent for review, as he himself thinks and believes. He does not assume infallibility, but simply gives his opinion. . . . We have no interest in misrepresentation, in exaggerated fault finding, or in exaggerated praise, and more than all we have no interest in silently ignoring good books sent us for review. The progress of medical science depends largely on the dissemination of the best books, and the recommendation or criticism of books by medical journals should be carried on conscientiously and in the interest of medicine."

David S. Jacobs, M.D.
Book Reviews Editor

The University of Kansas Medical Center: A Pictorial History, by L.H. Larsen and N.J. Hultston (University Press of Kansas, 1992), illustrated and indexed, hardcover \$35.00.

This abundantly illustrated, beautifully printed work is a great deal more than an excellent archivist's photo album; its text is even better than the photos! The text includes facts not widely known. For instance, following the Civil War, 20 or more proprietary medical schools operated in Kansas and western Missouri. Many were diploma mills. In keeping with the 19th-century spirit of free enterprise, such schools sprang up across the nation, competing one with the next by shortening curricula and reducing requirements.

The authors discuss both the accomplishments of the school and the handicaps faced by its founders. The Dean at the struggling school from its beginnings in 1905 to 1911 was George Edward Hoxie, M.D. He is described as an idealist who supported devotion and personal sacrifice by physicians. Beset by political and other challenges, he recalled memories "like those of a bad dream, where one set of visions merges into another without any explanation or logical se-

quence." Dr. Hoxie was not to be the last Kansas physician plagued by such woes.

Dean M.T. Sudler, a key figure in the school and hospital, was fired for reasons of political patronage. He ultimately was replaced by Dean Harry Wahl, who served from 1924 to 1948. Dr. Wahl, too, faced entrenched political opposition and inadequate state resources. The medical school was described in 1926 as "forlorned and orphaned," having withstood years of struggle against the ravages of insufficient appropriation. Dr. Wahl has been described as wearing three hats: a good pathologist who remarkably also functioned as hospital administrator and dean.

Early teaching facilities are documented, including St. Margaret Hospital and Bethany Hospital, each in Kansas City, Kansas; and General Hospital in Kansas City, Missouri. (The St. Margaret Hospital is shown on page 31. Its name disappeared with the recent renaming of Providence-St. Margaret to Providence Medical Center. General was the forerunner of the Truman Medical Center.)

I have known Dr. Hubert Floersch for 29 years, but until this pictorial history became available I was unaware that this gracious gentleman could sketch skillfully. One example of his work, a wonderful caricature of Dr. Logan Clendening, appears on page 100.

A new spirit of progress was described during the Murphy-Wescow period, which began in the late 1940s following Dr. Wahl's tenure as dean. Dr. Murphy is quoted as follows: "As knowledge of medicine has expanded, so has the death rate fallen. There is no way to bring down costs and at the same time keep up this declining death rate."

Following the Murphy-Wescow period, from the 1960s, the attrition rate among high-level administrators at the Medical Center was alarming. This seemed especially so in comparison to Dr. Wahl's 24-year tenure. The text acknowledges that such administrative instability delayed solutions to identified problems, although a number of these individuals were extremely hardworking, dedicated people.

An illustration on page 181 of a class taking place in December 1982 does not identify the professor, whose back faces the camera. But it

can only be the dean of Kansas City and Kansas pathologists, Dr. Frank Mantz, in a characteristic pose. His enthusiasm is evident, even in a photograph.

The recently retired D. Kay Clawson, M.D., was Executive Vice Chancellor during an unstable period. His eight-year tenure is documented with several photographs.

Only minor errors were detected by this reviewer. On page 124, the class is one of medical technology interns rather than laboratory technicians; and on page 196 the professional shown at a bacteriology bench is a medical technologist. The name of the chairman of the Department of Internal Medicine, Dr. Greenberger, is misspelled in a caption on page 202, but the photo is first-rate.

Small flaws notwithstanding, the authors warrant appreciation for a job very well done. This well crafted *Pictorial History* merits a place in a great many personal libraries. It is available at the KU bookstore or through the publisher (913-864-4155).

David S. Jacobs, M.D.

A Practical Approach to Occupational and Environmental Medicine, 2nd edition, by Robert J. McCunney (Little Brown, 1994), indexed, illustrated, 823 pp., paperback \$59.95.

The author states that the purpose of this book is to help all parties involved in occupational health (including employees, employers, and health care professionals) to achieve the mutual objective of advancing the healthfulness of the workplace. This process includes the identification of health hazards at work and the diagnosis, treatment and — most important — prevention of adverse effects from associated hazards.

For its effective practice, occupational medicine has always required a broad scope of knowledge, and this book supports that diversification with 50 chapters and 64 contributing authors. It has an excellent index, a requirement for a book intended as a general reference. Each chapter complements the others, and emphasis is placed on the idea that the health of the employee does not stop at the workplace but extends to the home, the community and the entire planet.

Cumulative trauma disorders (CTDs) repre-

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sent 56% of all occupational injuries, yet this book devotes only five pages to the subject. This is probably due to continuing controversy surrounding CTDs, the lack of statistical research to support direct or indirect relations between employee and the workplace, and the ready availability of other excellent references specifically addressing the topic.

This book would make a good resource for the health care provider involved with the demanding and widening field of occupational medicine.

J. Mark Melborn, M.D.

The Good Doctor, by Susan Onthank Mates (University of Iowa Press, 1994), \$22.95 hard-bound.

This collection of twelve short stories received the John Simmons Short Story Award from the University of Iowa Press. The author is a physician practicing in Rhode Island and a former concert violinist. All physicians will recognize and identify with the expressions of life and death explored in these stories, but women in medicine will find them particularly compelling.

The jacket illustration, an Italian renaissance painting of the Madonna nursing the Christ child, hints at the themes of nurturing, sacrifice and diverse cultures coming together that are the unifying threads of the stories inside.

For example, in "Laundry," a physician on maternity leave tries to juggle her responsibilities as a wife, mother, doctor and human being. Should she take another job so the family can afford some extras such as new bicycles for the older children? "After all I am a doctor." Should she have used bleach on that last load of laundry? Is she turning into a housewife? "I swore never a housewife, never, never, I won't fall in that black hole, not me."

While she is away from her duties at the hospital, one of her patients dies after a long struggle with cancer. Should she have taken a more aggressive approach when he asked for her advice, or was she right to tell him that she would avoid the surgery? "Maybe I never learned this language right, medicine, I feel like I'm a visitor from some other world dressed up like a doctor but they can tell I'm not really one because in moments of great stress I revert to my native tongue."

In fact, the author excels at native tongues. In other stories, she captures the accented English of Cambodian immigrants and working-class

Portuguese Americans and paints a horrifying portrait of a postwar German boarding school.

The author's eye for poetic detail is revealed in both narrative and dialogue, and she possesses a fine skill for understanding and expressing what her characters think, even when they are saying something quite different.

In "Sleep" a college professor mother and a dentist father are having trouble getting their four-year-old daughter to sleep all night without coming into their room and awakening them. They are preoccupied with their own careers, and each expects the other to spend more time on child care.

The mother's "specialty is philosophical poetry; she studies Plato, Aristotle, the Stoics, Epicurus. In imagining her life, she has not foreseen this quicksand of the minute."

The little daughter obviously senses the tensions in the household and begins to imagine monsters in her room. Loss of sleep makes all three irritable and anxious. The story is a wrenching portrait of families in which both partners try to advance their careers while raising happy, well adjusted children. Mates depicts the situation with authenticity and sympathy.

This reviewer found all the stories in the collection compelling, moving portrayals of the human condition as it is experienced late in the twentieth century.

Susan Ward

CRANIOPHARYNGIOMA

(Continued from page 23.)

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I Prepare to Study Medicine

ARTHUR E. HERTZLER, M.D.

The most encouraging sign that the human race may ultimately achieve a Christian civilization is to be found in the changing attitude toward children. Quality is receiving attention, something that does not worry the lower animals and that is relatively new among civilized races. Many now realize that children, having been born without their consent, have some rights which parents must respect. It has become quite generally recognized that parenthood carries some responsibility. There would be no excuse to drag forth a description of the conditions of the past were it not that this concept is not generally recognized, not even in the next block. Yet in the history of progress in the attitude toward children we find encouragement for the hope of further advance in the future.



To cause a child to obey because he loves his parents is a new thought in our civilization, a thought grasped after only two thousand years of alleged Christian civilization.

This is not the place to examine too closely the reasons for the disregard of the rights of the child. Children played a useful economic part in the struggle for existence, to which end everything was sacrificed. The child as such had no inherent rights. Having produced him, the parents' obligations were fulfilled. His presence in the scheme of things was almost wholly economic and he was levied on at the earliest possible period figured in terms of usefulness. This concept, admirable as a general proposition, was the subject of common abuse. Minor ailments did not absolve the child from his labors. Unless the child was obviously acutely ill no attention was paid to his complaints. Many diseases, insidious in their beginning, caused no distress, hence they passed without recognition, and being unrecognized were ignored. Only when death threatened was the doctor appealed to for help.

The child once born had the choice of dying or fighting for his life, and circumstances largely decided which would be his portion. Broadly speaking, the fittest survived; the weakling had no chance. This attitude is not so neglectful as it sounds. Parents learned that to call a doctor then available was likely to end only in expense. My first experience with a doctor, before my recollection, resulted in the prognosis that I would die before morning. He added, so it is related, "Too bad, he is such a smart-looking boy." I have always cherished this generous opinion because, so far as I know, he is the only person ever to make this keen observation.

It must be remembered that those were the days of the pioneer. It was a case of "root hog or die" for the grown-ups as well as the children. Children merely took up the burden; it was a family affair. This was the spirit which built the nation.

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The old and new ideas loom large in the life of every practicing physician. There are still neglected children who are duplicating the childhood which was the common lot half a century ago. One has only to look around the corner to find the old conditions existing today but little changed. This state is the concern of civilization in general. "Bring the little children unto me" has sounded down the avenues of time for two thousand years. Yet even today the admonition falls on unhearing ears. It was an expression of affection and carried no mathematical implications.

The childhood of sixty years ago was essentially one of neglect. It was due not to a lack of parental affection, but to the customs of the times. One heard the expressions "Spare the rod and spoil the child" or "Lick hell out of them and larn them," or "Lam them and make them tough." These expressions, though having a different ecclesiastic touch, led to the same result. It made them tough or broke their spirits. To the child these quotations had an equally ecclesiastic sound as they were stored in our subconscious selves.

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DONALD L. VINE, M.D.,* *Wichita*

Discussions of the cost of medical care often suggest that a "complete history and physical" be performed before ordering a particularly expensive diagnostic test, as though the doctor's time were free. The doctor's time, of course, is far from free.

With this in mind, every portion of the physical and history should undergo the same scrutiny with respect to its cost in time, benefit in information and reliability of results that any laboratory test is expected to pass. If a diagnostic test result could not be reproduced in a variety of laboratories by a variety of technicians, then it would not pass the reliability test and should not be performed.

Fourth Heart Sound

Thirty patients scheduled for cardiac catheterization at the Methodist Hospital in Indianapolis during the mid-1980s and 20 "normal" hospital employees or ambulatory non-cardiac patients underwent cardiac auscultation, echocardiography and phonocardiology.¹ The examiners were staff cardiologists and medical residents who were blinded to the results of non-auscultatory examination findings. A total of 342 physical examinations were performed by nine examiners. Results were compared with phonocardiographic findings, and interobserver agreement was evaluated.

A phonocardiographic fourth heart sound was recorded in 69% of subjects and a split first sound in 73%.

All nine examiners agreed on the presence or absence of a fourth heart sound in only 20% of the subjects. A fourth heart sound was present by phonocardiography in 69%, but was recognized in only 30% of all examinations. Of the 16 subjects lacking a recordable fourth sound, cardiologists mistakenly identified one as present in 10%. House officers were similarly mistaken 33% of the

time. House staff were more likely to confuse a fourth heart sound with splitting of the first sound than were cardiologists.

Third Heart Sound

Two cardiologists, a cardiology fellow and a medicine student from McGill University each examined 36 to 65 of 81 patients with (47%) or without (53%) a diagnosis of congestive heart failure. Interobserver agreement was determined by pairing each observer with every other observer and analyzing concordance.²

Percentage agreement was 50% or less for each pairing, with a cumulative average of 49%. If partial agreement was considered by using a weighted percentage, the cumulative agreement reached 62% and three pairs of observers were in partial agreement 71% to 78% of the time.

Finally, the kappa score was determined to evaluate the deviation of the paired agreement beyond chance alone. The cumulative kappa score was 0.3. This means the chance of the second observer hearing a third heart sound noted by the first observer was only 30%.

Formal Testing

Computer-processed audiotapes were used to test 501 medical students, internal medicine residents and cardiology fellows on their ability to distinguish heart sounds and murmurs.³

Third and fourth heart sounds were correctly identified and distinguished from similar sounds (opening snaps, early systolic clicks, etc.) 20% to 35% of the time with little difference between different trainee groups. All three groups were better at distinguishing the presence of an abnormality with timing similar to that of a third or fourth heart sound.

Comments

These studies, two of which were published in 1987, represent the bulk of recent literature that evaluates the accuracy and interobserver reliability for identifying gallop sounds.

The data for determining sensitivity and specificity of the auscultatory examination are not provided, but each study suggests major limitations

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in the accuracy of the physical examination for correctly identifying gallop sounds.

While it would be unthinkable to order a test from a laboratory using uncalibrated equipment, medical schools do not routinely test a student's ability to distinguish between two sounds separated by decreasing increments of time, nor for systematic evaluation of the ability to hear sounds in the frequency range of gallop sounds — nor is this a requirement of medical licensure.

Indeed, a recent survey indicates that only 27% of internal medicine and 37% of cardiology programs offer structured auscultatory training. Of the programs that offer such training, audiotapes were used in less than half.³

It is common, when students' and physicians' inability to perform accurate physical assessment is discussed, to decry the loss as an invitation to more tests and less cost-effective management of patients. This conclusion may not be true. The question now becomes whether or not it is worth the time and expense involved to assure that all physicians can accurately identify the presence of third and fourth heart sounds. Does the identification of a fourth heart sound, for instance, shorten hospital stay, eliminate the need for specific additional testing and help in choosing one form of therapy over another? Maybe, but large, prospective, randomized trials proving this hypothesis are not available.

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PHYSICAL ACTIVITY

(Continued from page 18.)

amount of the disease burden which can be lessened by physical activity.² Individuals may be more likely to adopt a lifelong habit of physical activity if they find activities which are enjoyable to them. Walking, swimming, bicycling, skiing, team sports, yard work, and gardening are just some of the many activities which can help to

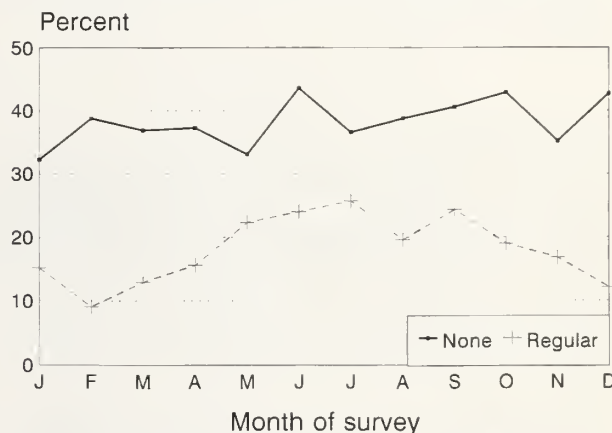


Figure 2. Leisure-time physical activity by month: Kansas, 1993.

avoid disease and improve participants' quality of life. Health care providers and other interested persons can contact their local parks and recreation department, recreation commission, schools, YMCA/YWCA, or local health departments to find out about organized activities in their area.

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To the Doctor in the House

Earlier this year the KMS Alliance sponsored a contest. Nancy Craig, Immediate Past President, says, "In honor of Doctors' Day, the KMS Alliance asked for submissions of artwork and essays from physicians' children. These are the winners, and we proudly present their work in honor of the physicians of Kansas. We, as your spouses and families, are proud of the work you do for medicine and for the people of Kansas."

A FAMILY OF DOCTORS

In my family there are eight doctors who have practiced medicine in Newton. My great-great-grandfather Dr. John T. Axtell and his wife, Dr. Lucena Axtell, founded Axtell Hospital and Clinic in Newton. It has been special to have my uncles, my dad, and my grandfather all take care of me. I like to go into the clinic and see my dad. He's an ophthalmologist. He helps a lot of people.

Recently my dad came to my classroom to discuss the value of an education for American Education Week. He talked about what he had to do to become a doctor. He said that it took a lot of work, but it was worth it. I hope to be a doctor someday too.

Let's celebrate Doctors' Day on March 30, 1995, by letting doctors know we are very thankful for having them and that we care about them!

Chris Beck, Age 11
(Son of Rick and Mary Beck, Newton)

DOCTORS' DAY

My dad's a family physician in Kansas. I like this because he knows what to do when we are sick, and I always feel safe. I figure if I choke, he'll know what to do. He's also pretty smart, and he can always help me with my homework. I'm proud of him, even though he sometimes makes me do a little extra to get it right.

Sometimes I feel sorry for him because it seems like he's always studying or reading something unusual, but I know he likes what he does.

I wouldn't trade his job for any other, and I know he wouldn't either. My dad is a great doctor, and I love him for it.

Katie Kellerman, Age 12
(Daughter of Rick and Janet Kellerman, Salina)



Crayon drawing by Jennifer Beck, age 7, daughter of Rick and Mary Beck, Newton.



Crayon drawing by Lauren Natalia Moore, age 6, granddaughter of Robert and Betty Moore, Caney.

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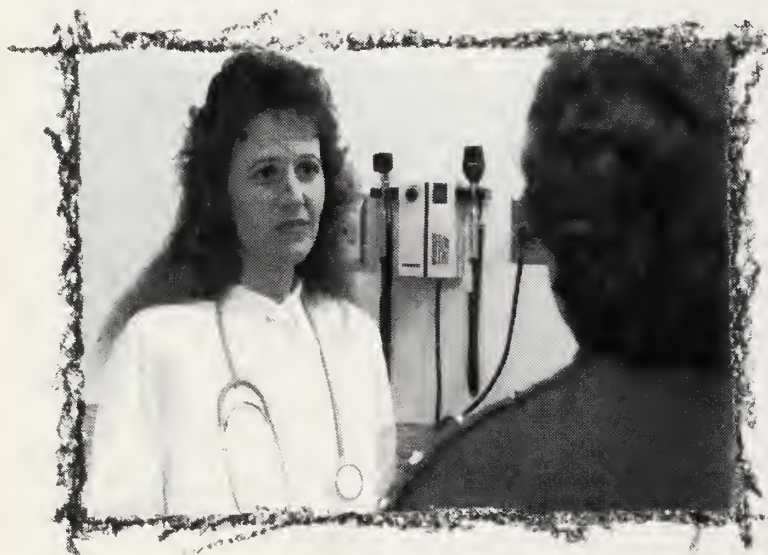
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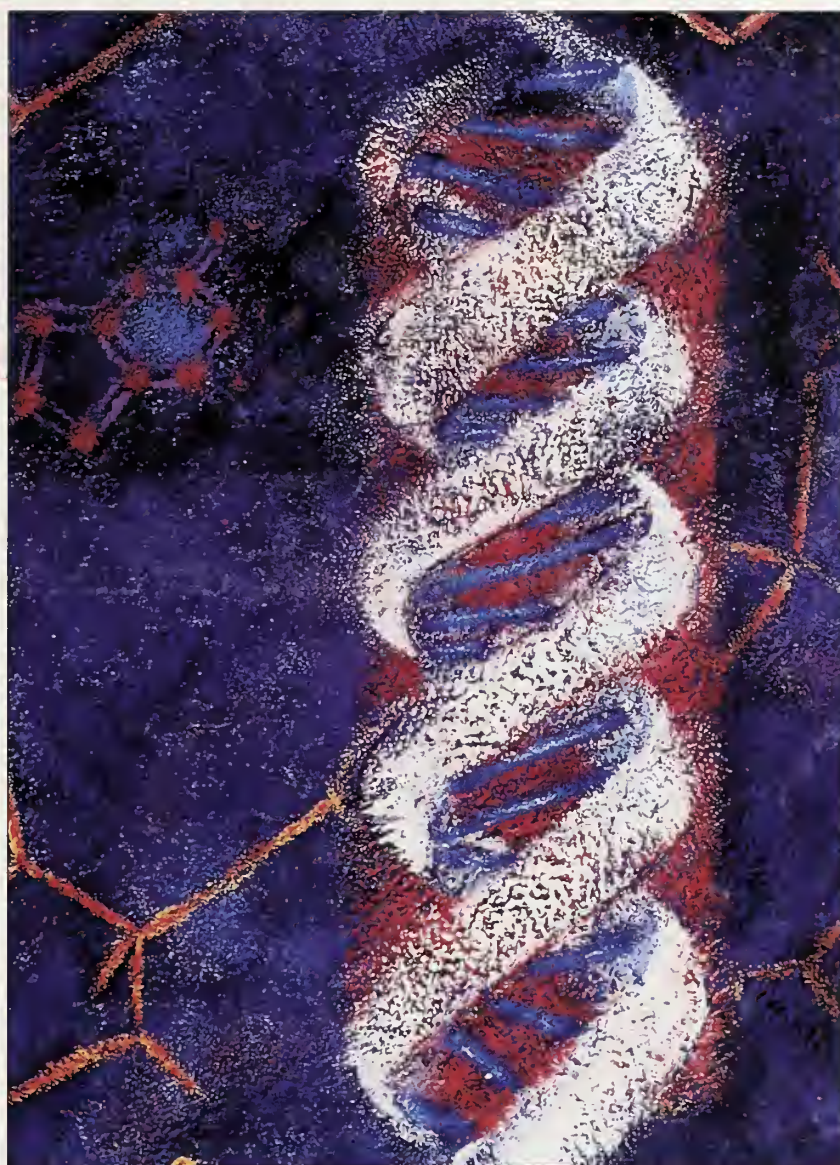
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Summer 1995

Volume 96, Number 2



Special Feature: Ethics and the Human Genome Project
Annual Meeting: Official Proceedings
Balloon Valvuloplasty for Isolated PVS
Legal Implications of Alzheimer's Disease



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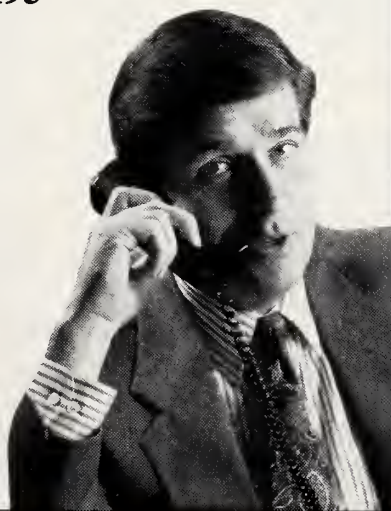
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Legal Implications of Alzheimer's Disease

WAYNE T. STRATTON, J.D.,* *Topeka*

Frequently the law lags behind scientific developments. The inertia in the development of legislation or the maturation of judicially resolved controversies does not seem to occur with the rapidity of scientific breakthroughs. But unfortunately, while the terminology has developed from "dementia" to "senility" to "Alzheimer's disease" (AD), or to "Alzheimer's disease and related disorders" (ADRD), no remedy has yet been discovered. What has been learned is the extent to which individuals are affected by the disease. Persons age 65 to 74 have a 1-in-25 chance of having AD. For those 85 and older, it is 45%. Stated another way, statistically, if a couple reaches 85 one of them will have AD.



Since this segment of the population is growing rapidly, the social implications of the disease are becoming apparent. The need for family or other forms of care may last six to eight years, but can extend for decades. As the disease progresses, the individual becomes increasingly debilitated and may lose all bodily functions.

In 1994 the Advisory Panel on Alzheimer's Disease issued a report on the legal issues in care and treatment. This panel was authorized by Congress and was appointed by the Director of the Office of Technology Assessment, a non-partisan analytical agency that serves the U.S. Congress.

As the panel notes, the economic cost of AD is staggering. Patients suffering from the disease may require extended periods of nursing home

care, and it is one of the late-life health problems most feared by American families, due both to the enormous suffering it causes and to the significant costs it incurs.

There is little law specific to AD and, consequently, it is necessary to look to the general areas of a number of subjects for guidance:

Determination of legal capacity is expressed in general terms under Kansas law. A person shall be considered a disabled person under the law pertaining to guardians or conservators when their ability to receive and evaluate information effectively or to communicate decisions, or both, is impaired to such an extent that the person lacks the capacity to manage such person's financial resources or to meet essential requirements for such person's physical health or safety, or both. The statute requires that a person who is thought to lack capacity to meet the essential requirements for physical health or safety must be unable to take those actions necessary to provide the health care, food, shelter, clothing, personal hygiene and other care without which serious injury or illness is more likely than not to occur.

Natural Death Act. Kansas has adopted a Natural Death Act which provides that life-sustaining care may be withdrawn for a "qualified patient." A qualified patient is one who has executed a declaration in accordance with the act and who has been diagnosed and certified, in writing, to be afflicted with a terminal condition by two physicians who have personally examined the patient, one of whom shall be the attending physician.

Durable Power of Attorney. In addition, Kansas has adopted the durable power of attorney for health care decisions procedure, which allows a person to grant authority to another person to make health care decisions. The power of the agent to act is not limited by the lack of capacity of the principal.

The Advisory Panel on Alzheimer's Disease makes several observations regarding ADRD and the foregoing types of legislation. It suggests that the early feature of memory loss alone does not necessarily compromise a person's ability to make

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603.

informed decisions or to express preferences; impairment or judgment arises in the course of the disease, not necessarily at its diagnosis. The panel suggests the court should weigh this distinction carefully in competency determinations.

The panel further recommends that because persons diagnosed in the early stages of AD often retain the ability to undertake voluntary transfers of decision making, health care professionals working with such persons should provide information about the mechanisms through which such voluntary delegations may be made. Physicians are in an important position to educate and influence a patient's recognition of the necessity of the early execution of a durable power of attorney.

It is critical that people express their wishes regarding care if they have received a tentative or confirming diagnosis of the disorder in its early

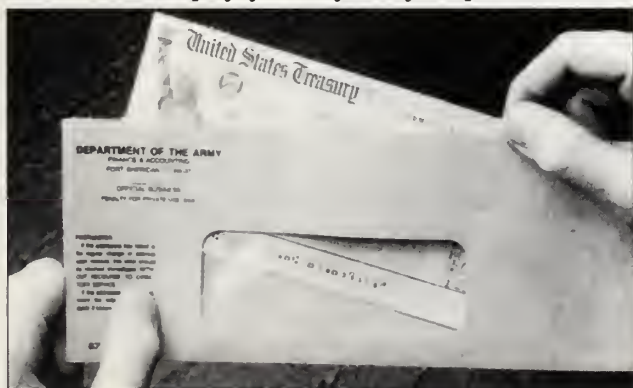
stages, or if there is any concern about potential future loss of cognitive ability.

Kansas law permits the withdrawal of life-sustaining care, as mentioned above, when a patient has been diagnosed and certified in writing to be afflicted with a terminal condition by two physicians who have personally examined the patient, one of whom shall be the attending physician. In the panel's opinion, AD today must be considered a terminal disease; end-stage AD is no less terminal than end-stage cancer or heart disease. The panel suggests that individual physicians, courts and families should be granted broad permission to establish when an advance directive of a person with AD should be honored.

Until medicine finds a cure for this devastating illness, physicians are in an important position to assist their patients with the social and legal implications of the disease.

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History and the Genome Project

ROBERT P. HUDSON, M.D.

Last spring, the University of Kansas School of Medicine-Wichita, the Wichita State University, and Kansas Health Ethics co-sponsored a seminar entitled "Present at the Re-Creation: Human Genome Ethics Conference." The presenters delved into the rationale of the Human Genome Project, current knowledge, the potential for good and bad applications of new information, and the ethical issues raised by this knowledge. It seemed there were many more questions than answers.

In this issue of the journal, we publish several papers presented at the conference. To introduce them, we gladly relinquish our column space this month to Robert P. Hudson, M.D., renowned medical historian and beloved teacher of many practicing physicians among our readership. At the conference, Dr. Hudson made a presentation that urged caution and deliberate restraint in lieu of a rapid rush to implement the real and perceived potential benefits of human genome research. His views of mistaken and mishandled treatments of the past (all well intentioned and based on the state of the art at the time) serve as a warning not to make similar mistakes through inappropriate clinical applications of information gained from the Human Genome Project. W.E.M.

The nuclear genie escaped the bottle at Hiroshima with no previous public debate — indeed, with no public knowledge that scientists were busily stuffing a terrible genie into the bottle. The very future of civilization on Earth was decided by a group of scientists simply doing it the way scientists did at the time. That damage is done. Few historians — few thinking persons of any occupation, I imagine — doubt that one day, probably sooner than later, some crazed person will explode a nuclear device as a form of extortion or terrorism, or simply as a maniacal ruler having a bad day.

So far, relatively few good or bad clinical actions have derived from the new genetics. There is still limited time for thoughtful planning. But the power inherent in the genetic capabilities now close at hand can only be characterized as awesome, and my historical perspective tells me that if left to themselves, the pioneers of genetic manipulation will use each new discovery as quickly as a medical opportunity presents itself. I fear this will occur not just in somatic cell therapy, but eventually in germ line cells as well. To avoid the stigma of doing away with "defectives," germ line interventions will occur under the seductive term "enhancement therapy," meaning manipulation designed to reproduce a "desirable" trait in succeeding generations.

I may end up a masculine Cassandra in this matter, but I doubt it. I am driven to my melancholy conclusion by some three decades of concerted study of what physicians have done with the discoveries handed them by medical science.

To bolster my contention, consider only three of the many medical conditions that were labeled as diseases in my training days, but which are no longer considered as such today. In particular, note what was done with them once they attained the status of "disease."

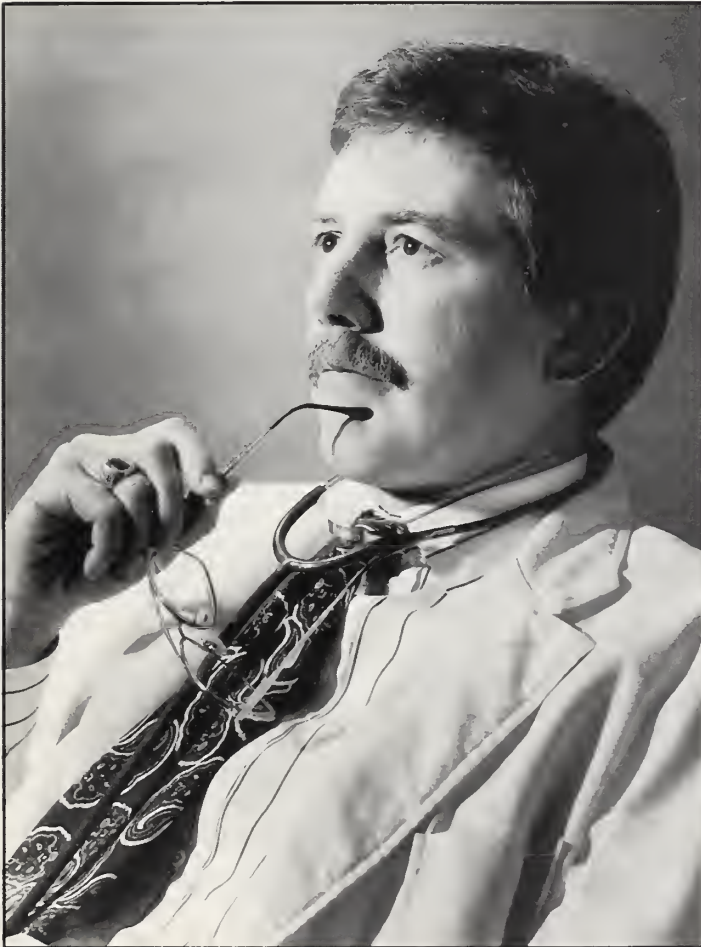
Status lymphaticus was a disease of the newborn, in which an "enlarged thymus" was believed to put pressure on the trachea, resulting in asthma-like symptoms and even death. To shrink the thymus, physicians employed x-irradiation, which indeed reduced the size of the gland, but which also produced carcinoma of the thyroid in a number of these persons when they reached their 30s and 40s.¹

The second example is chronic intestinal stasis. When diagnostic x-ray and contrast media became available at the turn of this century, physicians were surprised to find that several abdominal organs, the colon in particular, drooped far below what was considered their normal position. It was held that kinks resulted, which slowed the transit of the intestinal contents. This allowed the absorption of toxins produced by intestinal bacteria, leading to what was termed auto-intoxication. Many dire diseases, including cancer, were thought to result from this sequence. A host of treatments were utilized, the ultimate being total colectomy.²

The third diagnosis was focal infection, which was defined in Cecil's textbook as "a localized infection which produces symptoms in other parts of the body, but without showing bacteria in the blood." The more important sites of focal infec-

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tion were teeth, tonsils, sinuses, the gallbladder, genito-urinary structures, and occasionally the appendix. As no objective evidence was required to establish the diagnosis, untold thousands of non-vital organs were removed, often prophylactically.³

These three examples share characteristics that are pertinent to the present status of genetics. First, they occurred in organs which were thought to have no function, or whose function was considered dispensable. Of the thymus, my 1950 textbook of pediatrics said, "No structure of the body is less understood, nor, with few exceptions, has had more functions attributed to it, than the thymus gland."⁴ My physiology text did not even index the tonsils or adenoids, two of the structures most commonly indicted in focal infection.⁵ And regarding the colon, the seat of most intestinal stasis, no less a scientist than Nobelist Elie Metchnikoff pronounced that, "It is no longer rash to say that not only the rudimentary appendix and caecum, but the whole of the large intestine are superfluous, and that their removal would be attended with happy results."⁶

Consider the unmitigated arrogance! Simply because the role of the large intestine had not yet been clearly elucidated, a leading scientist was ready to conclude that this immense, complicated abdominal tube, replete with nerves and blood vessels, was nothing more than a sewer pipe which could be casually discarded. I do not take refuge in teleology in these matters — that is, the argument that the human body was perfectly designed for all its functions by a divine providence. I have personal reason to question the wisdom of running the urethra through the prostate, but I do not have the hubris to declare the arrangement an unequivocal mistake, nor suggest how it should be improved.

The second pertinent feature shared by the examples is that the errors in theory which produced the "diseases" would have been relatively harmless if physicians and their willing patients had not gone on to concoct therapies, many of which produced dreadful morbidity and mortality. Sir Arbuthnot Lane, the father of intestinal stasis, removed more than 1,000 colons personally, with a total operative mortality of 24%.⁷ Two hundred and forty patients dead from treatment for what we would consider nothing more than constipation.

In each example, the medical scientists made their pronouncements from their Olympian perches, rode over any opposition from their col-

leagues, and never lacked a supply of unwitting patients.

To return to the main subject, *we do not understand the workings of the human genome in anything like real depth*. Most experts agree we have only scratched the surface. Yet, as in our examples, we are pressing ahead without knowing how the genome may work as an integrated structure. Despite token input from a few humanists, medical scientists are in charge. The misgivings and questions being raised by ethicists, theologians, legal thinkers and some cautious scientists are scarcely being heard.

Even some of the humanists are apparently being swept along in the excitement. LeRoy Walters, of the Kennedy Institute of Ethics, wrote, "The central ethical questions in somatic cell gene transfer and therapy [are] well understood by researchers, by politicians, by the press, and by the general public."⁸ We are supposed to believe that the immensely complex ethical ramifications of the genome project (or the genome itself, for that matter) are understood by a public whose rate of minimal scientific literacy was estimated at a mere 7% even before the serious decline in American education was generally recognized.⁹

Most, by far most, of the dreadful results of erroneous medical theories pressed into clinical practice prematurely could have been avoided by nothing more than the passage of time and the improved understanding that followed. James Neel has lived through most of the new genetics. For the moment I stand with him when he pleads, "Let's for once take our time."¹⁰

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Assessing the Social Impact of Human Genome Research: A Status Report

ERIC T. JUENGST, Ph.D.*

The Human Genome Project is an international scientific research initiative with three major goals. The first is to create detailed maps of certain molecular landmarks, called "sequence-tagged sites," on all 23 human chromosomes. Geneticists can use these molecular landmarks to locate the specific sections of the DNA that provide cells with instructions for building particular proteins; e.g., the human genes. The second goal is to develop better ways to measure the distance between those landmarks in molecular units (e.g., numbers of DNA segments, or nucleotides) so that the genes can be isolated more precisely between them. The third goal is to improve DNA sequencing technology, so that once genes are found, they can be decoded more efficiently. The project has been planned as a 15-year effort, ending in the year 2005, and represents the most ambitious "tool-building" project within biology to date.¹

The complete set of genes in human cells (i.e., the human "genome") is estimated to contain between 50,000 and 100,000 individual genes, but only a few thousand of these have been isolated and identified so far.

The Clinical Impact of Genome Research

The medical value of identifying specific genes lies in the clues they can provide to the causes and dynamics of a wide variety of diseases, from inherited disorders like sickle cell anemia to acquired health problems such as cancer, diabetes and heart disease. The identification of the gene involved in cystic fibrosis, for example, showed that the disease comes from the inability of patients' cells to take in and pump out salt in the normal way. That made it possible to identify the specific genetic mutations in the salt transport gene that cause the problem. For basic biologists,

genes can also provide valuable clues to the normal operations of human cells, by indicating which proteins are involved in a particular cellular process.

Once specific genes have been located, isolated and decoded in the laboratory, they and their mutations also become easy to detect in the clinic. That means that long before researchers will be able to produce new therapies on the basis of the pathophysiological clues genes provide, it will be possible to screen people for the presence of those clues.²

Ethical and Social Implications

Managing the acquisition and delivery of this new form of health risk information will involve addressing a cascade of personal, professional, ethical and public policy challenges.

For the individuals and families who might avail themselves of these tests, questions will arise about the relative benefits of the knowledge they might gain, given their tolerance for uncertainty, and their interpretation of the personal significance of genetic risk information. This is often interpreted deterministically, as an immutable prediction of future problems, and reductionistically, as a fundamental indicator of personal identity. Both tendencies can complicate personal decision making about the merits of acquiring genetic risk information, and open the door to the stigmatization of people whose genetic health risks are known by others.³

Acquiring genetic health risk information also raises a number of ethical questions for individuals and families about their moral obligations to their kin. Genetic information almost always applies to relatives as well as the individual tested; do "testees" have obligations to warn their kin of the familial risks they have discovered? Conversely, do families have any obligation to assist a relative in clarifying a genetic health risk, when unwanted information about themselves may be generated in the process? Finally, genetic testing raises questions about a family's obligations to its

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future generations as well: given that the growing range of genetic risk assessments will be able to be performed prenatally as easily as postnatally, what set of risks should conscientious parents test for as part of their reproductive decision making?^{4,5}

In practice, answers to the dilemmas of familial obligation most often emerge from the specific histories and traditions of particular families. However, the same issues have analogs for the health professionals who help families through their decisions, as questions of professional ethics. How much education and counseling should accompany responsible genetic testing, and how seriously should personal understanding be taken as an access condition on testing services? If the patient decides not to warn relatives about their common risks, does the professional have an obligation to do so anyway? Should the profession set limits around the set of traits that it is willing to test for prenatally, regardless of parental requests? The biotechnology industry's interest in capitalizing on new testing capabilities by marketing them directly to health professionals and the public makes these questions of professional standards particularly urgent.⁶

Once tests are developed and deployed in clinical practice, another class of public policy questions emerges: questions about how the results of such tests might be used by parties outside the clinical setting. For example, consider the use of genetic testing techniques to benefit the public health through mass screening programs aimed at reducing the incidence of genetic disease. In the case of newborn screening and dietary prophylaxis for inborn errors of metabolism, this strategy can benefit society by benefitting the affected children. However, in the case of adult carrier screening for recessive diseases, a screening program can only reduce disease incidence if the adults involved take reproductive steps to avoid the birth of children with the homozygous genotype. A public policy endorsing such actions could be construed by clinicians and prospective parents as unduly coercive, and it risks exacerbating the stigmatization that already challenges people with genetic disabilities in our society.⁷

Moreover, knowledge of a person's genetic health risks can work directly to the individual's disadvantage if that information is used to determine their access to opportunities provided by social institutions and practices beyond the clinical setting. Should life insurance providers, for example, be allowed to use genetic risk assess-

ments to underwrite prospective clients? Might self-insured employers adopt exclusionary genetic screening programs to avoid potentially high-cost employees? For social policy-makers, advances in human genome research will increasingly raise the challenge of defining the nature and limits of "genetic discrimination" as it arises within different institutions and practices.⁸

Science Policy Implications

The Human Genome Project also raises questions for society about the future directions of research in human genetics. Inevitably, the gene discoveries it makes possible will suggest new explanations for many normal human differences as well, including variations in personality, behavior and intelligence. Moreover, as the project's maps are applied to different human populations, it will become possible to clarify the history of our species' migrations and ethnic differentiations. If these research efforts are to alleviate, rather than exacerbate, society's existing burden of prejudices, many argue that their design and conduct will have to be unusually influenced by assessments of their social impact. Against biology's history of bad experiences serving ideological goals, however, this insertion of social concerns into the design of scientific research draws criticism from many scientific quarters. Is it right to ask scientists to try to anticipate and influence the social uses of their research?⁹

One example of an attempt to complement scientific research with social impact assessment is the Human Genome Project itself. Acknowledging the cascade of ethical, legal and social issues its work could generate, the Human Genome Project has set aside a standing proportion of its research budget for projects addressing these issues. Since 1990, this support has generated a professional and scholarly community that has become quite active in attempting to establish research, clinical and public policies that can maximize society's ability to preserve its commitment to moral equality in the face of our species' biological diversity.¹⁰

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Genetic Advances: Influences on the Delivery of Health Care

COLLEEN SCANLON, R.N., M.S., J.D.*

Tremendous advances in genetic science and biotechnology have occurred in the last decade, and clinical applications of these advances are increasingly present in health care. These accomplishments are generally driven by a desire to understand and improve the health of individuals. Each discovery holds new insights into human genetics and new prospects for clinical diagnosis and treatment. Technologies which were once a hopeful expectation are now feasible and in some situations routinely used; the shift from the novel to the normal is rapid. Our understanding of the contribution of genetics to common disorders and cancer is burgeoning. Clearly, there are immense benefits for individuals and families. Yet the promise these scientific breakthroughs hold is at once exciting and alarming.

While lauding our accomplishments in human genetics, we must anticipate the poignant consequences and problems attendant to this vast scientific progress. Concerns about social injustices, unfair discrimination, personal burden, minimal therapeutic interventions, misuse of genetic information and access to services are valid. As genetic science evolves and matures, increasing attention must be focused on the social, ethical and professional implications. The benefits associated with the expectations of genetic advancement should not obscure the need for health care professionals to thoughtfully consider and responsibly guide the integration of genetic services into the delivery of health care and thus keep the scale weighted on the side of promise.

Genetics in the General Context of Health Care

It is important to appraise these genetic advances

within the broad context of health care. The failure of national health care reform legislation has not impeded the rapid and encompassing transformation of the U.S. health care system. The trends in health care are, in large measure, driven by economic and business considerations. Contemporary debate over health care reform and issues of equitable access, quality of care, resource allocation and cost containment have implications for genetic health care.

This era of technologic advancement, entrepreneurship, information expansion, and consolidation and restructuring of delivery systems presents new challenges and redefines others. Managed care is emerging as the most prominent archetype of health care delivery and financing. There is a shift from hospital care to outpatient and ambulatory care, and a greater emphasis on community-based services and primary and preventive care. Clinical decision making is influenced by the development of technology assessment, outcome measurements and practice guidelines. These unprecedented and unrelenting changes are revolutionizing the way in which health care is being delivered.

Genetics in Health Care Delivery

Integrating genetics into the delivery of health care can be considered from three perspectives: services, resources and infrastructure. Each of these raises practical concerns and challenging questions and requires an understanding of the ethical and professional implications.

Services. Questions related to describing what genetic services are, where they are delivered and by whom are important. Though the term genetic services is somewhat vague and variously defined, it is used here to include *diagnostics, laboratory, therapeutics, counseling* and *education*. Each of these service areas requires a careful evaluation and the development of standards, which could include an assessment of quality, accuracy, clinical indicators, preparation of providers, availability, informational protection and reimbursement.¹ The provision of genetic services has moved be-

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yond university-based genetic clinics to tertiary-care settings, primary care, public health programs, private laboratories, medical offices and satellite genetic clinics, and it involves a larger group of health professionals.

Diagnostic services is the area of genetics that has seen the largest expansion and application in clinical care. Prenatal testing, carrier identification, newborn screening, presymptomatic and predictive testing, and disease determination are all possible and increasingly available. Each of these raises unique and complex questions. The associated concerns of genetic heterogeneity, emotional ramifications, uncertainty of diagnosis, and variability of disease expression necessitate careful review and analyses of benefits and burdens. While diagnosis is not cure, the information elicited can be significant in conceiving appropriate therapies and cure.

It is vital to critique when and how genetic testing and screening are introduced into clinical practice. Unless health professionals evaluate the responsible introduction and utilization of these services, they may arrive because of market forces and monetary interests, rather than professional recommendation. Assessment prior to the introduction of new diagnostics should at least include clarification of goals, establishment of criteria for recommending diagnostics, priority setting among tests and/or conditions, and determination of the information necessary for individual decision making. It is important to consider in advance what criteria will be utilized to determine the relative value of these technologies and determine on what basis they will be incorporated into clinical practice.²

Therapeutic services have not expanded as rapidly, and many genetic disorders are seen as therapeutically futile. Interventions have focused on symptom management and palliative care, rehabilitation, medical monitoring, dietary approaches and psychosocial support. The hope of gene therapy has caught the imagination of both the public and health providers. Currently the expectations surrounding gene therapy exceed the immediate prospects. There is also a great deal of controversy around human gene therapy, and often the acceptability distinction is drawn between somatic gene therapy and germ line therapy.³

Genetic counseling has emerged as an important specialization within genetics. Historically, genetic counseling focused primarily on providing medical and genetic facts and risk figures to indi-

viduals making reproductive decisions.⁴ Given the expansion of genetic technology, counseling has become more dynamic, and its context has broadened. As genetic services become integrated into the broad delivery of health services, all health providers will need to be able to give accurate and sensitive genetic information. While all health professionals may not be prepared to provide "genetic counseling," they will be called upon to render patient counseling about genetic concerns. The ethos of non-directiveness, which is at the core of genetic counseling, will undoubtedly undergo some scrutiny as it is interfaced with traditional concepts of health care decision making.⁵

Education about human genetics is vital for health professionals and the public. Though there is increasing genetic information through mass media in magazines, newspapers, infomercials and television, there is a paucity of formal genetic education programs. The quality of information that is generated in the public arena varies and requires careful scrutiny to assure its accuracy and usefulness. Additional educational opportunities to prepare professionals to provide competent genetics care and to help the general community to understand and make decisions around genetic issues is essential.

Resources. When one considers the quickening pace of human genetic discovery and its assimilation into routine health care, one realizes there is a significant personnel issue. Health care professionals in all settings will care for individuals with genetic concerns, whether they be related to specific disorders or to screening, testing and counseling options. It seems apparent that at this time there are not enough health professionals prepared to deal with the magnitude of demand for genetic services. The number of trained medical geneticists and genetic counselors will be insufficient to deal with the projected growth in this area. So far, physicians, nurses and other health professionals have generally been inadequately educated to deal with this dimension of practice. With the expected continuation of significant genetic progress, it is crucial that professionals recognize the importance of this area of practice and be adequately prepared to respond.⁶ Education must be provided to students in health care programs, as well as to large numbers of health providers already in clinical practice.

Infrastructure. Vital to the responsible integration of genetic services into the delivery of health care is concern about the needed infra-

structure: the systems to support and direct this integration. The development of policy, regulations, standards and fiscal provisions is necessary as the integration of clinical genetics proceeds. Establishing measures of safety, effectiveness, cost, utilization and impact will facilitate the sound monitoring that is warranted. The need for safeguards (e.g., informational control, non-discrimination) cannot be over-emphasized as this expanding area of health care is embraced. Methods for evaluating the benefit to individuals of genetic services, compared to other health services, will be necessary to make responsible decisions about how to allocate resources. The expansion of genetic health care will carry enormous cost consequences.⁷ Health care professionals should engage in professional and public dialogue regarding genetic advances and advocate for the creation of systems that are non-discriminatory and equitably accessible.

Visioning Genetics for the Future

As never before, advances in genetic science and technology are interfacing with social, political, ethical, legal and economic issues. The challenge is to take advantage of the tremendous advances to date, and those projected for the future, in an ethically and socially responsible manner. Balancing the competing needs and goals of all those involved tests our creativity and morality. Such an endeavor will require the collaboration and commitment of health professionals, policy makers, consumers and the genetics community. Visioning genetics for the future and its integration

into the delivery of health care is not a static process, but requires responsiveness and flexibility. It necessitates predictive reflection (i.e., what will it be like?) and normative reflection (i.e., what should it be like?). The goal is a comprehensive, integrated and ethically sound approach to the provision of genetic services in health care, with adequate resources and a reliable and protective infrastructure. Health care professionals can provide significant leadership and take an active stance to ensure the quality of genetic health care.

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The New Human Genetics: Ethical Issues and Implications for Public Policy

MICHELLE A. MULLEN, Ph.D.*

The Human Genome Project represents an unprecedented enterprise: the largest and most concerted scientific effort in human history. The host of issues raised by the efforts and products of the project is formidable and presents new and grave challenges to current approaches to both ethics and public policy analysis. This paper briefly reviews major issues raised by the human genome project, with attention to those issues which are novel, and describes essential features of ethical public policy.

Issues

Annas and Elias have proposed a three-tiered taxonomy to describe the major issues arising from the human genome project: first, individual/family issues; second, societal issues; and finally, issues related to species.¹ At the individual/family level, two major ethical issues are implicit in all of these sorts of tests: autonomy and confidentiality. Autonomy requires that all screening programs be voluntary and that consent is sought only after full disclosure of the implications of a positive finding has been made *and* understood. Confidentiality requires that the results not be made available to any third party without the individual's consent.

Yet in both employment and insurance settings, concerns arise out of the proliferation of available genetic screening. The historic view that genetic screening and testing is a private matter will continue to be challenged, as a variety of stakeholders with an interest — whether legitimate or not — seek access to this deeply personal information.

At the societal level, Annas and Elias have identified three areas of concern: population-based screening, resource allocation and commercialism, and eugenics. The final level described is

that of issues related to species — that powerful technologies alter not only what we can do, but the way in which we think about ourselves.

But are these issues raised by the Human Genome Project truly novel in any way? Victor McKusick and others argue that the “problems” are not qualitatively different from those arising from the everyday practice of clinical genetics, although they are greater in scope and significance.² He identifies two generic risks: first that the information and products of the project will widen the gap between what we can diagnose and what we can do anything about; that is, what we can treat. And secondly, that the gap between what we really know and what we think we know will be widened.

Novel Issues

I suggest that there may be novel issues which arise in two other ways. First, the role of autonomy as a central concept in ethics analysis and in legal remedies may become something of an endangered concept. Our modern traditions and North American cultures value the autonomy of the competent individual most highly. Respect for individual autonomy provides the foundation for the elements of informed consent in health care, in which full disclosure, understanding, and voluntariness are necessary conditions for informed consent to diagnosis and treatment.

These requirements for consent may become increasingly problematic, however. Full disclosure of the implications of testing or screening may be impossible, since we cannot yet anticipate outcomes where third parties may gain access to genetic information about us. Understanding is problematic because much genetic information is probabilistic rather than definitive, and not least because as consumers many of us have very little knowledge about the complexities of genetic science. Voluntariness is suspect in those circumstances where individuals may be required to undergo genetic testing or screening in order to attempt to gain assets and opportunities of great importance in our culture — such as health or life

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insurance, or employment in a downsized world economy.³

Further, the very nature of genetic information challenges the traditional conceptualization of autonomy. By definition, human genetics pertains to relatedness, rather than separateness. This is not a trivial observation. Although Annas and Elias have grouped individual and family issues in one piece, the impact of positive genetic testing or the assessment of a substantial risk for one member of a family has implications not only for that individual's life, but possibly for family members (in terms of their potential risk) and for the individual's relationship with other family members. We will need to re-examine the meaning and operationalization of the autonomy principle.

A second way in which the impact of the Human Genome Project may give rise to novel ethical and social challenges arises from the confluence of genomic and separately derived, but mutually operational technologies: the mutual impact of genomic with information and reproductive technologies.

The importance of the "information superhighway" is an ongoing subject of scrutiny by scholars, policy analysts, and the public, through media interest. The power of information transfer made possible through networks of computers, both research and personal, is not yet appreciated or fully understood by most of us. Already, there is far-reaching, extensive and intrusive market research through access to our credit card use and direct-purchase buying patterns, video rentals and vacation patterns. Consider the potential and the hazards of computer access to our personal genetic information by insurers, employers, government and others. The banking of genetic samples and computer banking of genetic information requires immediate attention in terms of protecting the privacy of individuals and families.

A second intersection of a separate technology with genomic technology lies in the area of human reproduction. Our ability to create human preimplantation embryos in the laboratory through techniques such as in vitro fertilization has given us a unique window on the very beginnings of individual human lives. It also permits a window of opportunity for very controversial interventions, such as preimplantation genetic diagnosis.⁴ Early human embryos can be biopsied (one or two cells are removed with no apparent detriment to the subsequent development of the embryo), and a variety of genetic tests can be performed by means of highly sensitive rapid

DNA amplification technology. Thus "prenatal" diagnosis may be performed before any pregnancy has been initiated. Several dozen such programs are already operational worldwide, and apparently healthy infants have been born after genetic testing by this means.⁵ Even more troubling is the specter of genetic manipulation of human preimplantation embryos created in vitro. This is accomplished through the addition or deletion of genetic information.

Our challenge is to determine the appropriateness and efficacy of our current methods of ethics and policy reflection, and to amend these as necessary — in a timely fashion, in order to begin to address these complex and important concerns. The perceptions of patients, caregivers, families and analysts are in themselves valuable resources for our reflection — including, perhaps especially, our biases, if we can recognize them.

Troy Duster, a sociologist, has argued that the prism of heritability, the viewpoint by which we weigh the nature/nurture equation, is first a social matter.⁶ He notes that the "what" questions, that is, the content of research questions, are posed by scientists, clinicians and others situated in particular social contexts of education, power, values and aspirations. That is to say, the "what" of the question is intimately tied to the "who" of the questioner.

Ethical Public Policy

The framing of our debates is central. As Schattschneider states, "Defining alternatives defines conflicts, and defining conflicts defines the allocation of power."⁷ If the most vulnerable have no voice, their powerlessness increases. Framing dictates the sorts of policy solutions we will derive, yet we can go far in improving things by improving the *processes* of both our ethics and policy analyses. Ethical public policy requires the following:

1. Our analyses and policies must be relevant; this speaks to careful attention to framing of issues and the matter of "voice."

2. Managing the issues arising from human genomics requires a careful balancing of individual and collective interests. Both are extremely valuable but not unlimited, and the tension between the two must be judiciously traveled.

3. The technologies and possibilities of human genetics demand that we pay heed to the protection of the vulnerable. This again speaks to our framing of issues and attention to a variety of stakeholders.

4. Ethical public policy is also necessarily *transparent*. This suggests that the "who" and the "how" of deliberation, influence and analysis be open to wide scrutiny.

5. Finally, ethical public policy is accountable, and this feature necessitates all of the preceding factors.

It seems self-evident that those who wield power in our society are responsible for its use. Ultimately, this needs to be an overarching guiding characteristic of our activities, if we are to meet the enormous challenge of human genomics and to share in its many potential benefits.

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ETHICS AND HUMAN GENOME

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To the extent that insurance is a business, insurance companies will be duty bound to use genetic screening to exclude affected families from the insurance pool. But insofar as insurance is a communal, moral enterprise, the exclusion of the ill from the insurance pool is unacceptable. And, given genetic information and the medical costs associated with such illnesses, we must ask whether those affected with genetic diseases have a right to have children. This is a new moral problem presented to us by the development of genetic knowledge.

Knowledge usually has many ramifications and, as is so often the case, the technological generation of a problem may bring its own possible solution with it. We can discover not only

whether potential parents are carriers for some disease, but also whether an unborn child is affected. This technology, along with safe abortion techniques, makes it possible for carriers of genetic diseases to bring to term only healthy children. This knowledge and this technology, therefore, has presented us with a new moral problem: what to do when it is known that an unborn child has a severe genetic defect.

This novel moral problem is typical of those presented by the acquisition of information technology. There are no developed moral directions for such problems, for the problems never existed until recently. Whether our moral roots go deep enough for the resolution of such problems is an open question. What is quite clear, however, is that our most common method of solving moral questions, that of appeal to authority, is totally inadequate, for authoritative answers are those which have worked well in the past. Authoritative answers are simply not available for novel problems.

What scientific knowledge has done, and what the genome project will continue to do, is to present novel moral problems for which there are no traditional answers. We will have to discover and/or create our own moral directions and our own moral roots. This is a project we should look forward to with enthusiasm and not with trepidation.

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Ethics and the Human Genome Project

GERALD H. PASKE*

The human genome project is part of a scientific odyssey which began with the dawn of reason and has been pursued relentlessly and enthusiastically throughout all history. The odyssey has required the construction and destruction of numerous conceptual schemes and scientific theories, each of which has played its role for a brief period, only to give way to an enhanced and improved version as the human intellect progresses. This quest for an ever-increasing understanding of our world and our universe is at the heart of the scientific enterprise and is, perhaps, at the heart of what it is to be human.

This quest for scientific knowledge and understanding, this search for the novel, needs to be contrasted with the fear with which we approach new knowledge and new understanding in the areas of ethics and religion. In these areas, tradition rules and "fools rush in where angels fear to tread."

Today we live in an era of moral turmoil, in which many fear that we have lost our moral direction and our moral roots. But this fear is misdirected. We have lost neither our direction nor our roots, but we have cast ourselves into an environment in which the directions are not clear and our roots may lack the needed depth. The moral task with which we are confronted is to find our own direction and to enhance and develop our own roots. The reason for this is clear: ethics and religion must deal with the world as we know it, and as our knowledge of that world expands so must we expand our moral responses.

Although we have been developing scientific knowledge for centuries, the explosion of scientific knowledge is less than half a century old. Our previous moral directions have proven inadequate for this explosion of knowledge — yet it must be morally confronted through discussion in conferences and other arenas.

The moral challenge of scientific inquiry is serious indeed — so serious that there is one response which has become almost traditional: To learn more is to play God, so stop the inquiry now.

This fear of knowledge is not unreasonable, since any knowledge can be used for good or for ill. Fire can be used for warmth or for burning, the club for protection or attack. The truth of the matter is that the human mind essentially searches. The search cannot be stopped without destroying the mind, and humanity without a mind is not humanity at all.

The moral search is as much a part of what it is to be human as is the search for other knowledge, and the moral challenge with which we are faced should be accepted as enthusiastically as any other search for knowledge.

But because of the acquisition of information and the development of expensive technology, the moral search has taken a new twist in recent years. To see one role of these two factors, we need only to consider the health insurance industry.

Health insurance originated in a world in which there were only a few costly, treatable illnesses, and those illnesses, though they occurred randomly, struck very few people. Under these circumstances, one can purchase inexpensive insurance which protects one from the financial stress caused by being struck with such a disease. The likelihood of making a claim is minimal, the cost of insurance is small, and the potential gain is significant. Insurance pays.

The insurance industry today is in a state of near collapse, largely due to the increase in medical technology. There are so many costly treatments for diseases today that the price of insurance has skyrocketed. Genetic technology will only increase this problem.

But genetic *information* is even more significant. We have been willing to insure one another against randomly occurring diseases, but randomness is a matter of knowledge. When genetic screening indicates that the children of a given couple are likely to have expensive medical problems, the question of whether that couple should have children becomes a public concern, since it is the public, through insurance or a public medical system, which will have to pay the bill.

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Medical Ethics: The AMA's Leadership Role

Genetic testing. Assisted suicide. Rationing. Self-referral. Confidentiality. Health care today, because of an increasingly advanced technology and complex legal system, forces physicians to make decisions based on complicated clinical requirements and new moral assessments. The need for ethical guidance has never been greater.

Since its founding in 1847, the American Medical Association has maintained rigorous standards of ethical professional conduct to guide physicians in making patient care decisions.

Today, the AMA provides physicians with a code of ethics comprised of three integrated components: *Principles of Medical Ethics*, *Current Opinions of the Council on Ethical and Judicial Affairs*, and *Reports of the Council on Ethical and Judicial Affairs*.

The AMA's Code of Ethics: The code of ethics has guided physicians on a wide variety of ethical questions, and has often pioneered progress in ethical thought. In recent years, the AMA has issued pathbreaking opinions on physicians' obligation to treat patients with HIV and on the patient's right to refuse artificial life support when terminally ill.

The AMA's code of ethics has been recognized as an authoritative source of medical ethics by physicians, courts, legislatures and medical licensing boards. The AMA's opinions on specific ethical question are frequently cited in court decisions and Congressional debates. Your patients and the public in general rely on the AMA's code of ethics to identify the rights and responsibilities of patients and physicians.

Inspired by the Oath of Hippocrates, the *Principles of Medical Ethics* instruct the physician to provide

competent medical service with compassion and respect for human dignity. They direct the physician to expose colleagues who are deficient in character or competence and to seek changes in laws which are contrary to patients' best interests. They safeguard patient confidence and the pursuit and sharing of scientific knowledge with colleagues. Finally, they point out the physician's responsibility to contribute to an improved community.

Current Opinions elaborate on how ethical principles apply to today's medical practice. Issue categories include: physician's duties to patients, social policy issues, and inter-professional relationships. Currently, the AMA has issued more than 100 current opinions and reports on specific ethical questions.

Reports of the Council explain in greater detail why the AMA has taken positions on specific ethical issues in medicine. They give insight and practical guidelines or recommendations to help practicing physicians with their decisions. *Reports* cover 15 different topics ranging from conflict of interest to guidelines for institutional ethics committees.

In the coming year, the AMA will accelerate review and revision of *Current Opinions* and support adherence to them through organized medicine and state licensing boards; to increase their dissemination and make them as accessible as possible to all our members.

It is clearly evident that concerns about the nature of care, autonomy and justice are not far from the mind of patients, physicians and the courts. As technology expands, ethical dilemmas encompass new territories: fetal tissue transplants, genetic engineering and issues regarding the quality of life. As in the past, the AMA will continue to provide guidance on moral as well as medical aspects of your patients' health.

Balloon Pulmonary Valvuloplasty for Isolated Pulmonary Valvular Stenosis

LEONE MATTIOLI, M.D.,* JOHN M. BELMONT, Ph.D.,* KENNETH GOERTZ, M.D.,* ROBERT ARDINGER, JR., M.D.,* *Kansas City*

Isolated pulmonary valvular stenosis (PVS) is identified at physical examination by its characteristic pulmonic systolic ejection murmur, frequently accompanied by an early systolic click, and sometimes a palpable thrill. PVS is diagnosed and graded according to the magnitude of the pressure gradient across the pulmonary valve, as measured directly by catheter or as calculated by Doppler echocardiography. Accepted criteria for PVS severity based on catheter gradient are: "trivial" < 25 mm Hg; "mild" 25-49; "moderate" 50-79; and "severe" ≥ 80 .¹

The natural and post-surgical histories of PVS are fairly clear.¹ At diagnosis, about 10% of PVS patients under the age of 12 years show symptoms, which may include angina, fatigue, labored breathing and, rarely, syncope. Appearance of symptoms rises to 20% in older children, and at all ages symptoms increase with increasing PVS severity. Cyanosis occurs in about 40% of infants below age two years with moderate to severe PVS, in less than 10% at that age with trivial to mild PVS, and in less than 10% beyond that age, regardless of PVS severity. About 50% of infants with moderate to severe PVS will have congestive heart failure (CHF), which is a serious concern. Other age groups are at minimal risk for CHF, regardless of PVS severity.

Untreated PVS is rarely fatal except in its critical neonatal form. The clinician's chief long-term concerns are the hemodynamic effects of PVS (cardiac enlargement and right ventricular hypertrophy). The literature shows that at diagnosis, about 35% of patients with moderate to severe PVS will have cardiac enlargement, and about 60% will have right ventricular hypertrophy. For

trivial to mild PVS, the corresponding prevalences are 13% and 11%.¹

Hypertrophy is especially important because it can lead to ischemia, dysrhythmias and ventricular dysfunction.² Proper management of moderate to severe PVS aims to reduce hypertrophy by relieving the valvular obstruction. Until the 1980s the treatment of choice was surgical valvotomy, and long-term follow-up information is available only for this procedure. As compared with medical management alone, valvotomy has no clear long-term advantage with respect to the appearance of symptoms or cardiac enlargement. Concerning hypertrophy, however, surgery makes an important difference: Under medical management alone the prevalence of hypertrophy increases by 30% to 40% over the long term, while it decreases by 65% to 85% following surgery.¹

Balloon pulmonary valvuloplasty (BPV) was introduced in 1982³ as an alternative to valvotomy. BPV has become the preferred treatment because it yields immediate reductions of the gradient comparable to those obtained by surgery,^{4,5} it is far less radical and less costly, and it apparently leads to less pulmonary valvular insufficiency and fewer ventricular dysrhythmias, which were the principal undesirable side effects of valvotomy.⁵ BPV is safe; our review of 29 series involving 1,780 BPVs reported between 1984 and 1993 shows significant early complications in only 1.5% of the cases (references supplied upon request).

Long-term follow-up results such as those available for surgical valvotomy are not yet available for BPV. Reports of intermediate-term BPV follow-up (approximately 5 years) show that restenosis, signified by recurrence of a significantly elevated gradient, has typically occurred in 14% to 33% of the cases⁶ and may be more frequent in patients under age two years.⁷ For the large majority of patients, however, the gradient reduction persists at follow-up and often shows spontaneous improvement beyond the immediate post-treatment level.⁵⁻⁸ Here we describe retrospec-

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tively our BPV experience at the University of Kansas Children's Center.

Patients

From June 1988 to May 1993 we performed BPV in 13 consecutive infants and children in whom isolated PVS had been diagnosed by Doppler echocardiography. Two of these patients required repeat BPVs, one because the first procedure failed to achieve a satisfactory gradient reduction, the other because of restenosis. Thus, 15 BPVs were performed. The children's ages at the time of their most recent BPV ranged from three days to 13.1 years (mean 5.7 years, SD 4.8, median 4.1).

Methods

Data are reported here as mean \pm SD. The severity of PVS was confirmed by the last Doppler gradient obtained prior to BPV (pre-balloon Doppler). The interval between pre-balloon Doppler and BPV ranged from several hours to 4.23 months (0.74 ± 1.20 months, median 1 day).

In the course of routine right heart catheterization, the systolic pressure difference across the pulmonary valve was measured and averaged over 10 beats (pre-balloon catheter gradient). Following placement of markers by right ventricular cineangiography, the stenotic pulmonary valve was dilated using commercially available balloon valvuloplasty catheters. Single balloons were used. The diameter of the fully dilated balloon was intended to be 1.2 times the measured diameter of the pulmonary valve annulus. The balloon was inflated until its waist had practically disappeared (figure 1 A, B). About 15 minutes following dilation, the systolic pressure gradient was again measured by catheter (post-balloon catheter gradient).

Follow-up residual gradients were evaluated by Doppler, the follow-up interval ranging from 0.61 to 4.70 years (2.29 ± 1.18 , median 2.11). The severity of pulmonary valvular insufficiency at follow-up was assessed by color flow mapping of the right ventricular outflow tract.

Differences between mean pressure gradients were tested using one- and two-tailed repeated-measures Student's *t* tests. Correlations were tested using two-tailed Pearson's *r*. Group differences and correlations were considered significant if $p < .05$.

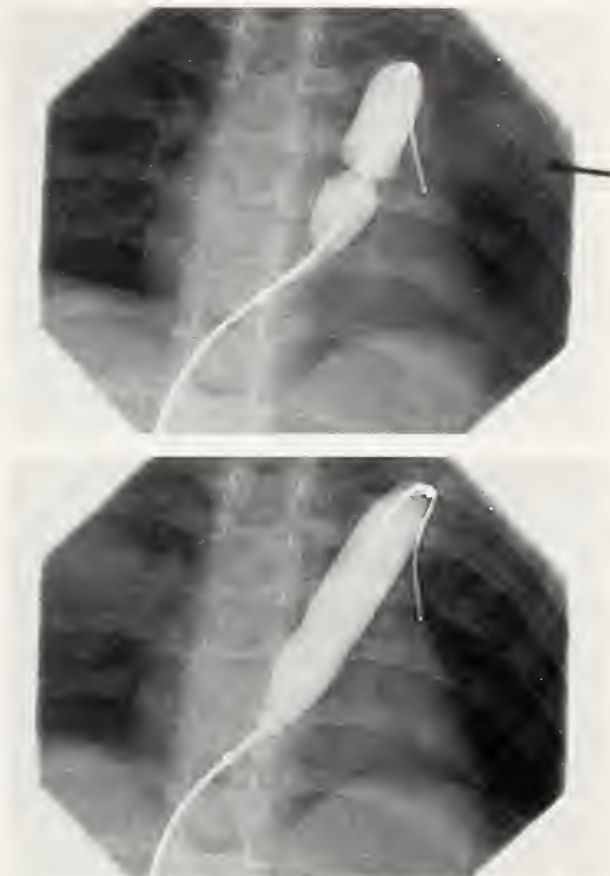


Figure 1. Selected cineangiographic frames of a balloon dilation catheter placed across the stenotic pulmonary valve. The waist outlining the stenotic valve during dilation (A) is practically abolished upon completion (B).

Results

None of the 15 BPVs done on 13 children resulted in complications. For purposes of this follow-up report, we present data from only one BPV per child (the most recent, in cases of repeated BPVs).

Nine patients (69%) were hospitalized for one day, 3 (23%) for two days, and one (8%), a neonate, for seven days.

Figure 2 shows the distributions of individual patients' gradients at each stage from pre-balloon to follow up. Figure 2's indicated ranges of qualitative severity ("trivial" to "severe") refer to the accepted grading of PVS.¹

Pre-balloon Doppler gradients ranged from 51 to 135 mm Hg (75 ± 22 , median 69). Nine were "moderate" and 4 "severe." Pre-balloon catheter gradients ranged from 40 to 160 mm Hg (73 ± 33 , median 64). The correlation between pre-balloon Doppler and pre-balloon catheter gradi-

ents was high ($r = .90$) and significant ($p < .0001$); the mean difference between the two measures was negligible (2 mm Hg) and non-significant ($p = .64$, NS). Thus, pre-balloon Doppler gradients provide highly accurate predictors of the intra-procedural catheter gradients.

Post-balloon catheter gradients ranged from 5 to 125 mm Hg (32 ± 29 , median 26). Their mean decrease from pre-balloon catheter levels was large (41 mm Hg) and highly significant ($p < .0001$). Follow-up Doppler gradients ranged from 13 to 49 mm Hg (25 ± 9 , median 23). The mean decrease from pre-balloon Doppler levels was likewise large (50 mm Hg) and highly significant ($p < .0001$). The additional improvement between post-balloon catheter and follow-up Doppler (7 mm Hg) was not significant ($p = .22$, NS), and the two measures were not correlated ($r = -.02$, NS).

Figure 2 (filled circles) shows the 11/13 patients (85%) for whom the procedure was immediately and durably successful, as judged by their gradients' being at or below 35 mm Hg (dashed line).⁷ Regarding the remaining two cases: Patient IH, whose gradients were the highest at diagnosis and pre-balloon, had a highly elevated post-balloon catheter gradient (boxed point: 125 mm Hg) that resulted from infundibular hypertrophy secondary to the valvular stenosis. IH was treated with propranolol and, as shown, presented a satisfactory "trivial" follow-up gradient (22 mm Hg). Similar observations and results of propranolol treatment have been reported previously.⁹ Patient RS, the only one for whom the procedure was performed because of prior restenosis, showed a satisfactory post-balloon residual gradient (30 mm Hg), but the follow-up (boxed point: 49 mm Hg) indicated she had again restenosed.

Pulmonary valvular insufficiency at follow up was absent or mild in 11 cases (85%), and moderate in the remaining 2 (15%). Insufficiency was not significantly correlated either with the size of the immediate post-balloon catheter-gradient reduction ($r = .33$, NS) or with follow-up Doppler gradient ($r = .15$, NS).

Discussion

Previous studies have shown that Doppler gradients computed at the time of catheterization correlate almost perfectly with gradients that are measured directly via the catheter.¹⁰ We found here that Doppler gradients obtained up to 4 months prior to BPV are also highly correlated with, and very close to, the pre-balloon catheter

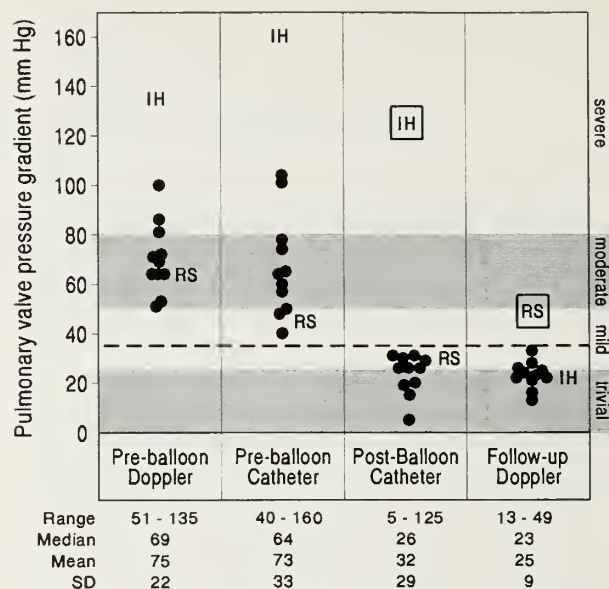


Figure 2. Distributions of pulmonary valve pressure gradients before catheterization (Doppler), immediately prior to and following balloon dilation (catheter), and at latest follow-up (Doppler) for 13 infants and children with isolated pulmonary valvular stenosis. Dashed line (35 mm Hg) indicates maximum "successful" post-dilation gradient. (•): 11 patients for whom the procedure was immediately and durably successful; (IH): patient whose immediate post-dilation gradient remained high because of secondary infundibular hypertrophy but was satisfactory at follow up; (RS): patient who showed satisfactory immediate gradient reduction but subsequently restenosed.

values. Since it provides an accurate, non-biased, non-invasive assessment of the severity of isolated PVS, Doppler echocardiography alone should be used for diagnosis and follow-up in this condition, with catheterization being used only to perform BPV.

Previous reports have indicated that children with severe valvular stenosis are at increased risk for restenosis following BPV.^{6,7} Our results confirm that trend. Our only patient who required a repeat BPV for restenosis had "severe" PVS (Doppler gradient = 163 mm Hg) prior to her first BPV. It has also been shown that very young children are at increased risk for restenosis.⁷ Our patient was one year of age at first BPV.

Table 1 shows that our pre-balloon and follow-up gradients were closely comparable to those reported in recent intermediate-term BPV follow-up studies. Our restenosis rate (8%) and low-grade pulmonary valvular insufficiency rate (85%)

TABLE 1
PRE- AND POST-VALVULOPLASTY PULMONARY VALVE PRESSURE GRADIENTS*

	Follow-up Period (yr)	Gradient (mm Hg)			
		Pre-balloon Catheter	Follow-up Doppler		
		N		N	
Present study	2.3 ± 1.2	13	73 ± 33	13	25 ± 9
O'Connor et al. ⁵	5.3 ± 0.3	20	76 ± 22	20	24 ± 12
McCrindle & Kan ⁷	4.9 ± 1.6	46	70 ± 36	42	20 ± 13
Masura et al. ⁸	5.2 ± 0.8	34	74 ± 34	34	19 ± 10

*Pre-balloon gradients measured by catheter, latest follow-up gradients computed by Doppler echocardiography, for patients treated for isolated pulmonary valvular stenosis: Present study compared with current literature. Figures shown are mean ± SD.

are consistent with the findings of others who have dealt with non-dysplastic isolated stenotic pulmonary valves,^{6,9} and our complication rate (0%) is consistent with the overall literature (1.5%).

In conclusion, for 12/13 (92%) of our patients, the intermediate-term results of BPV were excellent. BPV effectively reduces the pressure gradient across the stenotic pulmonary valve. The immediate reduction is substantial, it persists for at least several years, and compared with surgical valvotomy it is associated with less pulmonary insufficiency and fewer ventricular dysrhythmias. BPV is well tolerated, less traumatic to children and their parents, and less costly than surgery. Significant complications are rare, and failure and restenosis are infrequent and easily handled. We recommend BPV for patients with isolated PVS associated with a Doppler gradient ≥ 50 mm Hg at diagnosis. Following BPV, patients under age two years should be examined by Doppler every 6 months, and all others should be seen yearly.

Summary

Fifteen balloon pulmonary valvuloplasties (BPVs) were performed on 13 infants and children with isolated pulmonary valvular stenosis (PVS). There were no complications. Two patients required repeat BPV, one for failure, the other for restenosis. At the time of the 13 latest BPVs, age ranged from three days to 13.1 years (mean 5.7 ± SD 4.8 years). Average Doppler pulmonary valve pressure gradient preceding BPV was 75 ± 22 mm Hg. At follow-up it was 25 ± 9 mm Hg ($p < .0001$). Follow-up interval was 0.61 to 4.70 years (2.29 ± 1.18). Restenosis occurred in 1/13 (8%) of the patients. The remaining 12/13 (92%) showed highly satisfactory sustained gradient reductions. Doppler gradients preceding BPV by as much as 4 months correlated highly with

catheter gradients at time of BPV, confirming that Doppler echocardiography is a highly accurate indication of PVS severity. Catheterization for PVS should therefore not be used for diagnostic purposes alone. BPV can be performed safely, economically and effectively and is recommended as the treatment of choice for infants and children with moderate to severe isolated PVS. For very young patients, follow-up Doppler surveillance should be done semi-annually; for all others, annually.

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A Practical Introduction to Computers for the Physician: Computerizing the CME Record

RONALD B. DAVIS, M.D.,* *Wichita*

Automating (computerizing) a familiar and useful task is an efficient and confidence-building experience for the physician learning computer skills. We physicians need to catalog our CME credits, and there are numerous methods for doing this. One is the spreadsheet.

A spreadsheet can be a paper-based method or, as will be discussed here, a software implementation such as the popular Windows-based Microsoft Excel. The software approach provides flexibility and power. To begin, turn on the computer and bring up Windows.

Using the mouse, select the group icon containing Excel and double-click on it. When the application icons appear, double-click on Excel. This brings up the program, and you are ready to start.

First, the spreadsheet should be given a name for saving to the hard disk and future reference for retrieval. Click on File at the top left portion of the screen, then click on Save As . . . Enter CME, then click OK. In Summary Info click on OK. This saves the *current* version of the spreadsheet (empty at this point). Save your program after all entries to ensure an accurate and up-to-date file.

Columns are vertical and labeled with letters, while rows are horizontal and labeled with numbers. The members of the grid are called cells. Move to cell A1 and start the title row. Enter "Category" then move down to cell A2 and enter "I." Then move right to cell B2 and enter "II." Move to the cell to the right, C2, and enter "Date." It is best if the cells are formatted for date. To do this, click on the column header C

(this will highlight the entire column). Click on Format, then Cells. Now choose Date in the left column and choose the first entry, m/d/y, in the right column. Then click on OK. This is important because it allows sorting of the entries by date, giving chronological listing of CME courses, even if they are entered in random order. "Program Title" will be the next column moving right one cell to D2. This cell needs to be wider to accommodate entries. To accomplish this, place the cursor at the border of the column labels D and E, click, and drag to the right until a reasonable width is obtained (you may double click and the width will automatically be adjusted to the longest entry). The next column will be titled Sponsor. In column E2 enter "Sponsor." Again, widen the column as above. F2 will be "Location." Now you have the title rows (1 and 2) completed.

To create the first entry, go to cell A3 if it is category I CME or to B3 if it is category II. Enter the number of credit hours. Move to the right to cell C3 and enter the date in m/d/y format. Move right one cell to enter the program title, move right again to enter the sponsor, and move right again to enter the location. To record additional CME activities, repeat the above entries on the next available row.

After several entries, you will want to sum columns for categories I and II. An easy way to do this is to put the cursor on the upper left cell for category I hours (A3), click and hold. While holding the left mouse button down, move to the right one cell and down to the level of the last entry. Continue to hold the mouse button down. To get a location for the sum, go down one row further. Now release the mouse button. To get the sum, move the pointer to the tool bar and click on Σ . You now have the column totals in the row below the last CME entry. Position the cursor in the cell in column C to the right of

*Medical Director, Family MedCenter

Send correspondence to the author at 315 N. Hillside, Suite B, Wichita, Kansas 67214.

Category		Date	Program Title	Sponsor	Location
I	II				
3		1/25/95	Board Review Topics	Physician's Journal	Individual Study
4		2/15/95	Managed Care Update	Helpful Hospital	Hotel Inn, Yourtown, KS
	2	3/15/95	NSAIDs Indications	Hospital A	Hospital A, Smalltown, KS
1		4/3/95	Imaging Technologies	Hospital B	Hospital B, Bigtown, KS
2		4/13/95	Antibiotic Update	Friendly Hospital	Hometown, KS
10	2	Totals			

Your CME record should look something like this when completed.

the totals and enter "Totals." To enter additional CME, you will want to use this line for your next entry. Click on the row header to highlight the entire "Totals" row, then press the delete key on the keyboard. This will allow for more entries, and a new "Totals" row can be created by the same method as above.

You will want to print your spreadsheet. Use the File on the menu at the top left. Point to File and click, then click on Print. This accesses the Print dialog box. Click on Page Setup. Several functions are available by tabs. First, go to Page, the first of four tabs, where you will see the choice of portrait (8" x 11") and landscape (11" x 8"). If the spreadsheet is wide, landscape format would be most likely to present the entire width on one page. Otherwise, portrait will be satisfactory. Print Preview will reveal this, as will be explained later. Now click on the Header/Footer tab. Click on Custom Header and then click se-

quentially on each text in Left Section, Center Section, and Right Section. The example shows name, CME Record, and dates covered. Then click OK. Click on Custom Footer, highlight the text, push delete then click OK. Click OK again to bring up the Print dialog box.

You may wish to click on Print Preview to see your document before printing. Return to the Print function (if you went to Print Preview you will have to click on File, then click on Print) and click OK. This will print your CME Record. Be sure to save your spreadsheet by clicking on the disk icon located on the toolbar.

This exercise will give you an introduction to the use of software spreadsheets. As you maintain your CME record, you may find additional uses for the spreadsheet and expand your expertise with this software application. It will also help you develop expertise that can be carried to other software applications.

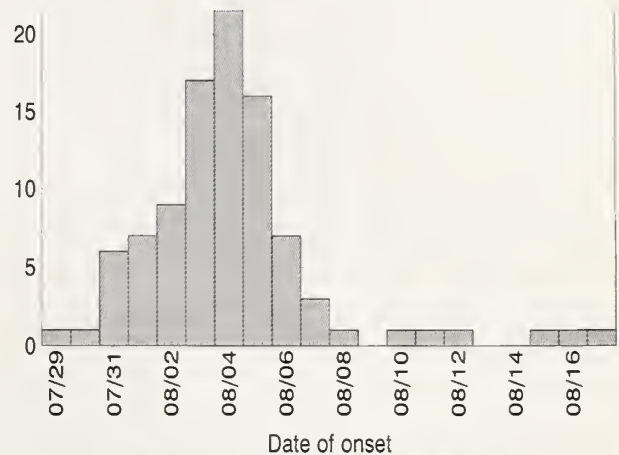
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A Swimming-Pool-Associated Outbreak of Cryptosporidiosis

Cryptosporidiosis was first recognized as a human illness in 1976.¹ It has since been identified as the causative agent in a number of outbreaks, including one affecting over 400,000 people in Milwaukee in 1993.² Infection occurs with person-to-person, animal-to-person, or waterborne transmission of the oocysts via the fecal-oral route. Symptoms usually include watery diarrhea and abdominal cramps but can also include nausea, vomiting, fever or anorexia.³ Symptoms among persons with cryptosporidiosis may be intermittent, but they usually resolve in less than 30 days. Infection may also be asymptomatic.

The Missouri, Iowa and Kansas departments of health jointly investigated an outbreak of diarrheal illness among Missouri, Iowa and Kansas residents who were participants in a girls' softball tournament in Missouri. A case was defined as: 1) an individual who attended the softball tournament on the weekend of July 29-31 and either stayed at a motel referred to here as Motel X or swam in the motel's pool, or who was a family contact of an attendee; and 2) had either a stool sample which tested positive for *Cryptosporidium* or reported having diarrhea on or after July 29th and being ill for at least 2 days.

One hundred and one of 186 individuals surveyed met the case definition, for an overall attack rate of 54%. The median age among the cases was 10 years, while the median age for the non-cases was 34. Seventy (69%) of the cases and 54 (64%) of the non-cases were female. Ninety-four (94%) of the cases reported diarrhea, 78 (80%) reported abdominal cramps, 66 (68%) reported nausea, 55 (56%) reported vomiting and 38 (40%) reported fever. Twenty-six (57%) of 46 stool samples tested positive for *Cryptosporidium*. The dates of onset ranged from July 29 to August 17, with most cases occurring on August 4 (see figure). All six case-patients with onset dates on or after August 10th were household contacts of cases with an earlier onset date. This suggested that secondary transmission between household contacts may



Onset of illness for Cryptosporidium outbreak: Missouri, July 1994.

have occurred. Incubation time, as measured from time of first exposure to the swimming pool until time of onset, ranged from 0.7 to 7.6 days, with a median of 5.4 days. Symptoms lasted from 1 to 38 days, with a median of 4 days.

Eating at Motel X was found not to be a risk factor for illness. The attack rate among those eating and not eating at Motel X at any time during the weekend was 55% (40/73) and 54% (61/113), respectively. The relative risk was 1.0 (95% confidence interval = 0.8, 1.3) and remained virtually unchanged after controlling for pool exposure, suggesting that those eating at Motel X were no more likely to be ill than those not eating at Motel X.

Swimming in the pool at Motel X was considered to be the common source of infection. The attack rate among those swimming in the pool at Motel X was 74% (89/121), while the attack rate among those not reporting pool exposure was 19% (10/52). Swimmers were almost 4 times more likely to be ill than non-swimmers (Relative Risk = 3.8, 95% confidence interval = 2.2, 6.7). Pool exposure accounted for 90% of the cases.

During the investigation, individuals complained that the pool appeared dirty and had a peculiar odor, and that contact with the water caused a burning sensation of the eyes. Inspection of the pool revealed that the filter was malfunctioning and that manual chlorination had not

Reported by: L. Wilberschied, M.S., Epidemiology Section, Bureau of Disease Control, Kansas Department of Health and Environment.

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been performed. Following the inspection, the pool was closed until hyperchlorination was completed. Tests done on water and sand filter samples collected after hyperchlorination were negative for *Cryptosporidium*.

Cryptosporidium is highly resistant to chlorine and, because of the small size of the oocysts (4 microns or less), may not be completely removed by standard pool filters. Therefore, to avoid infecting others, individuals should be discouraged from using swimming pools or hot-tubs while they have diarrhea. This is particularly important for non-toilet-trained children. In order to prevent the person-to-person transmission of *Cryptosporidium* oocysts, careful personal hygiene should be encouraged (i.e., frequent and thorough handwashing.) This is especially true for anyone with diarrhea or anyone caring for someone with diarrhea. Physicians seeing a patient with a *Cryptosporidium*-compatible illness should specifically request to have stool samples tested for *Cryptosporidium*, enteric bacteria and other ova and parasites.

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HIV Survey of Childbearing Women in Kansas, 1992-1994

Many infants of HIV-infected mothers have antibodies to the AIDS virus at birth. Often the presence of antibodies does not reflect infection in the infant; the antibodies are passively acquired from the mother in the uterus and reflect the mother's HIV status. In an effort to monitor HIV infection rates in women of childbearing age, many states, including Kansas, have started testing the blood of all live newborns for antibodies to the AIDS virus. In 1990 the Kansas Department of Health and Environment (KDHE) AIDS Section started the Survey of Childbearing Women (SCBW). At birth, blood is taken from all live newborns. After testing for certain metabolic disorders and hemoglobulinopathies, all personal identifiers are removed from the samples and they are forwarded for HIV testing.

KDHE analyzed the data from the SCBW for 1992-1994. There were 99,367 live births in Kansas between 1992 and 1994, the majority being whites, followed by blacks, Hispanics, Asians or Pacific Islanders, and Native Americans or Alaskan Natives (figure 1). Most of the mothers were between the ages of 20 and 29 years (figure 1). Of the 99,376 samples submitted for testing, 96,857 (97.5%) were negative on the enzyme immunoassay (EIA), 197 (0.2%) were positive, and 2,313 (2.3%) were not tested because the specimens were unsatisfactory. One hundred ninety-six EIA positive specimens were submitted for confirmation by Western Blot. Of these, 19 (9.7%) were positive, 117 (59.7%) were negative, and 60 (30.6%) were indeterminate (figure 2). This means that 0.02% of newborns had antibodies to the AIDS virus at birth. Between 1991 and 1992, Kansas (along with four other states with a prevalence of 0.03%) ranked twenty-third out of 45 states in HIV seropositivity among newborns.¹

The number of newborns with antibodies to the AIDS virus at birth was constant between 1992 and 1993, then decreased in 1994 (figure 3). HIV seropositivity in the newborns over all

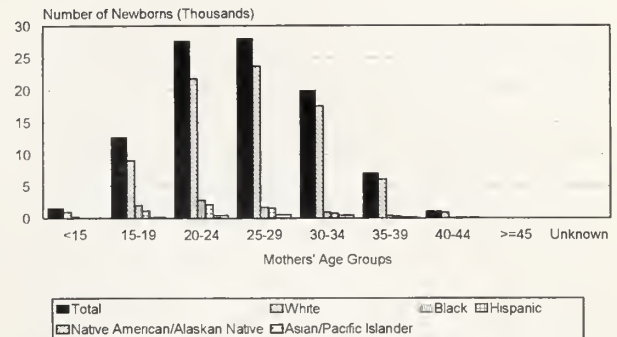


Figure 1. Total number of live births by mothers' race/ethnicity and age: Kansas, 1992-94.

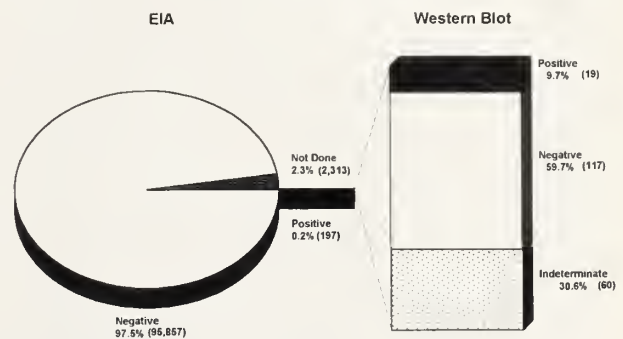


Figure 2. HIV test results: Kansas, 1992-94.

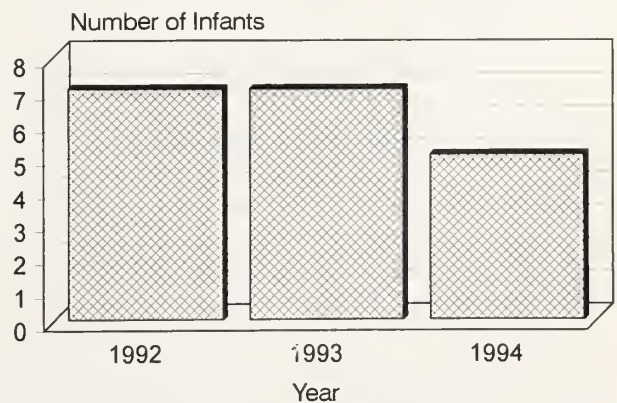


Figure 3. Number of HIV-positive infants by year of birth.

Reported by J. A. M. Calder, D.V.M., M.P.H., Ph.D. Kansas Department of Health and Environment, Bureau of Disease Control Epidemiology Section.

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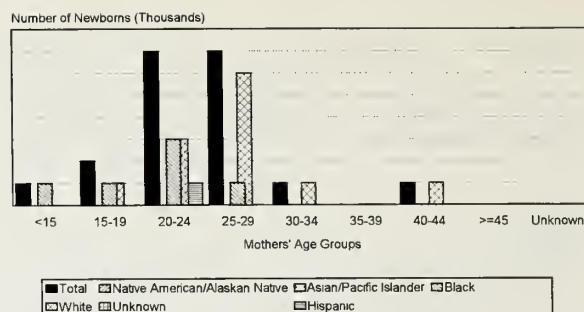


Figure 4. Number of HIV-positive infants by mothers' race/ethnicity and age: Kansas, 1992-94.

three years peaked for mothers aged 20 to 29 years, then declined with increasing age (figure 4). There were 12 white, six black, and one Hispanic HIV seropositive infants born between 1992 and 1994; no HIV seropositive infants were born to Asian, Pacific Islander, Native American or Alaskan Native mothers. In 1992 seropositive infants were born to mothers younger than 20 years. By 1993 and 1994, mothers below 20 years of age did not have seropositive infants.

Both the majority of births and higher rates of seropositivity occurred in the eastern half of the state. The data indicate that the percentage of HIV-seropositive newborns in Kansas is very low. The low seroprevalence in newborns implies that there is a low prevalence of HIV infection among women of childbearing age in Kansas. This is further supported by the AIDS surveillance data, which show that most of the AIDS cases reported are from men. An ongoing survey of HIV infection in women of childbearing age is valuable, as it allows us to monitor the trend of HIV infection in this age group of women. In addition, data gained from the survey can be used to estimate the total HIV prevalence in the state.

Given the low prevalence of HIV infection among women of childbearing age in Kansas, any future HIV screening efforts among pregnant women would best be targeted at high-risk women.

REFERENCE

1. National HIV serosurveillance summary results through 1992 (US Department of Health and Human Services, Public Health Service Centers for Disease Control and Prevention), vol. 3.

Facing the Future Together: Dr. Warren's Installation Address

I am truly honored to serve as your president. This year is forecasted to be one of great challenges and great change. There will be some changes that none of us can yet perceive, because so much change in medicine these days is caused by external forces and not those within our own organizations. This is why, as I indicated last evening at the installation, we must look within our organization, within each one of us, for innovative ways to solve problems. We must create new systems of organization and communication, so that we can respond to change and challenges in a unified manner, in order to best provide our patients with the same quality of care that they have grown to expect over the generations from Kansas physicians. The means of access to care may be different, the method of reimbursement may be different, the avenues of referral may be different — *but what should absolutely not be different is our relationship with and quality of care of our patients: the doctor-patient relationship.* That is the essence of Kansas medicine, and we must preserve that.



I see the “personality” of the Kansas Medical Society to be multifaceted: city specialist, city generalist, rural generalist, private practitioner, HMO member, academic physician, ER physician, hospital-based physician, KMS staff members, KMS lobbyists, male physicians, female physicians, minority physicians, white physicians, foreign-trained physicians, young physicians, old physicians, students, residents, fellows, medical directors of insurance companies, KFMC-employed physicians. But all have in common the face of a Kansas physician or KMS staff member working to help the Kansas physician. And it is the way we choose to work with each other to maintain the personality strengths that will give the product we offer to our patients and fellow members greater depth, greater quality — because of the uniqueness of all the members who make up the whole.

I have a few ideas about ways we can attain this goal, and I would like more ideas from the rest

of you — because you are this organization.

The staff and I have discussed the creation of an inter-specialty council. The concept is that this council would meet twice a year to discuss common problems and issues, and also to discuss areas of discord so as to (we hope) not allow our organization to be splintered and destroyed by differences which could be lessened by communication and understanding.

Because of the large geographical size of our state, there are many who rightfully have felt out of the loop. We are considering presenting to the Executive Committee the concept of a pilot project to address this issue. This would be, as an experimental project, to establish a satellite office in western Kansas to provide a link between the western part of the state with the central office. This would be a local KMS link for the physicians in that area. It could assist the physicians in coordinating meetings, collecting dues, helping to provide speakers, etc. It could also share space with Heartland Health and KaMMCO to decrease costs — but the essence would be to give KMS a local presence so as to truly assist the physicians. If this pilot project is a success, it could be expanded to other areas in the future.

To further involve more physicians, we plan to have a task force to increase membership and involvement. This task force will be made up of the groups which have traditionally been under-represented: women, minorities, foreign medical graduates, academics and young physicians. For this fall, we plan a single-day conference on women in medicine, with a guest speaker.

I was quite pleased with the sentiment and concern of KU's new chancellor, Dr. Hemenway, when several of us met with him last month to discuss KUMC and the physicians in the state. He was concerned that many felt that communications had broken down over the years with KUMC. He was concerned that physicians throughout the state no longer feel much of a bond with KU. He was interested in working with us to rectify that. He also was interested in offers made by KMS to assist KU legislatively with some of their needs through our representation and credibility in Topeka. We hope that this inter-

est will be able to be transformed into an improved working relationship with KUMC and into involvement of KU's physicians in the activities of our society.

Young physician recruitment will be a high priority, as will students and residents. I firmly believe that if we can foster early involvement in organized medicine in a medical career, it will continue through a lifetime of practice.

Educational programs will be ongoing to meet the changes of this year. As an example: Carolyn Price will be doing documentation workshops almost immediately around the state to help us meet the August 1 deadline, when Medicare will begin asking for repayment for inadequate documentation for overcoding by their standards. Carolyn is an absolute encyclopedia of federal regulations and knowing how to do it right. Please listen to her, use her expertise, and follow her advice. KMS, with Gary Caruthers' leadership, has been working with the KHA to do rural managed care workshops. This is another example of how we will be meeting the needs of our Kansas physicians.

Our legislative battles will continue and magnify. There is no way to overemphasize the problems of everyone wanting to practice medicine. Chiropractors want to engage in pediatrics, nurse practitioners want to prescribe drugs and practice medicine independently, pharmacists want to engage in internal medicine, podiatrists want to administer general anesthesia and amputate feet, counselors want to diagnose and treat mental illnesses, and lay midwives want to practice obstetrics. As Jerry, Chip and Jimmie say, the groups are starting to coalesce — all those that want a part of the practice of medicine — and they see us as the enemy. Battling one at a time is one thing, but all together is another issue. We need help from all of you. The Reference Committee has started the ball rolling with their wise recommendation to adopt Substitute Resolution 95-2, Task Force on Practice Issues [subsequently passed by the House and published elsewhere in

this issue — Editor]. We will keep you informed, and we ask for your involvement and aid at the local level. We *must* have successful political actions, and our success rests on three factors:

1. Money for election and re-election of our political friends. This comes through your efforts: money given personally to your political friends, and money given collectively through KaMPAC are both basic and essential.

2. Personal and collective integrity. We cannot be represented as professional and altruistic unless we *are* professional and altruistic.

3. Professional political representation of unquestioned integrity. Our lobbyists, Jerry and Chip, are superb and have this integrity.

Of the three, only the last can be delegated. The first and second depend on us and are our personal and collective responsibility.

Heartland Health is entering another phase as its leadership is working to bring providers contracts, sign up hospitals and then market the network. There will be many changes as Heartland enters our lives. For the metropolitan physicians it should be a welcome change to work with a physician-directed program, in contrast to the others they deal with. To rural physicians, it will be a change, and a threatening one, to deal with managed care. But what better way than to deal with it with our friends and partners of past years. I will aid the Heartland staff any way they desire to make this a success.

Yes, it is a year of challenge, of change — but what potential! The potential to make our organization even stronger because of the need to work together successfully to preserve the integrity, joy and satisfaction of the practice of medicine. And we will succeed because, as the theme of last night's program stated, we will be facing the future together.



Target Tomorrow—Today

Lisa Barker was installed as the KMS Alliance President at the Annual Meeting in Overland Park in May. Following is her address, in which she outlines the Alliance's focuses for the year.

The theme I have chosen for the alliance this year is "Target Tomorrow—Today." The future of medicine is a concern to all of us. We can't begin to know what that future is, but we do know we cannot sit idly by today and wait for tomorrow. The Kansas Medical Society Alliance will target four areas that we feel are important to the future.



We will target legislative issues today for medicine tomorrow. I cringe when I hear the term "health care reform." My daughter, Brooke, had a bone-marrow transplant four years ago and a bilateral lung transplant two and a half years ago at two of the finest hospitals in the country. She is living proof that health care in the United States is the best in the world. However, our health care *system* does need to be reformed.

Stan and I, throughout our many hospital stays in five different states, have befriended many people who have become prisoners in the health care system. People who have had to give up custody of their two-year-old terminally ill little boy to the State of Kansas because their bills went over the \$1 million limit of their insurance. People who have been forced into divorce so their sick child would qualify for state health aid. People who have to beg their communities to help them financially so their children can get needed health care that insurance companies deemed "too experimental." Situations like these are all too common. These are not medical problems; they are problems created by the health care system.

The Kansas Medical Society Alliance will work alongside the medical society to help keep health care in Kansas at its best, and to help reform the system. We will work as a team on issues such as malpractice reform, access to health care and violence against women and children. In February we will once again convene in Topeka to let our legislators know that we are aware of the issues and that we care about medicine in Kansas. We will urge more counties to start mini-internships through their medical societies and alliances, and

we will keep our communication lines open and will continue corresponding one-on-one with our state representatives.

The alliance will target the American Medical Association-Education and Research Foundation to help continue quality medical education in the future. If you were at the AMA-ERF benefit during the KMS Annual Meeting, you heard a story from a medical student about how the funds have helped support him through hard times. These are the stories that keep the alliance working so hard for our students in Kansas.

The total funds raised this year by the KMS Alliance for AMA-ERF were \$27,666. Of that amount, \$7,989 was raised at the auction here in Overland Park. We thank you all for helping us make our goal for this year, and I pledge that the alliance will once again make this goal and, we hope, surpass it. With your continued support we can truly make a difference for tomorrow's doctors, today.

Our health projects will help all Kansans tomorrow through the work we do today. Organ and bone-marrow donation will be a major emphasis of the KMS Alliance this year. This is an important project to me because transplantation has greatly affected my family.

The alliance will encourage all eligible physicians and spouses in Kansas to have a donor card. If our medical families are not advocates of organ and bone marrow donation, who will be? My son Ross was nine years old when he donated bone marrow to Brooke. At his young age, he realized the importance of his donation. I know Kansas medical families also realize this importance. Transplantation is medicine's miracle procedure. Physicians must educate patients and encourage the public to become bone marrow donors today and organ donors tomorrow. The gift of an organ is the greatest gift anyone can give or receive, and believe me, you never forget the person who sacrificed for you. One of my favorite sayings is, "Don't take your organs to Heaven. Heaven knows we need them here."

Another health project this year is the preven-



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tion of violence. Today, many feel violence is the major health concern in America. Many young people are dying from gang and street violence. More women and children are dying or requiring medical treatment due to violence than any other one disease. We must target violence today for our children's tomorrow.

The AMAA introduced a program at the national meeting entitled SAVE Today. SAVE stands for Stop America's Violence Everywhere. This program is designed to unite alliances all over America in one common cause. SAVE Today will be observed on October 11 this year and the second Wednesday of October thereafter. Our county alliances and auxiliaries will be asked to have a program in their schools or communities to help with violence awareness. In October, in Topeka, the KMS Alliance will once again help sponsor the Governor's Conference on Child Abuse. SAVE Today is an exciting program and with alliances unifying toward the goal of violence awareness, we will be heard today and will make a difference for tomorrow.

The alliance will target a changing membership. Our organization must look ahead and change today to meet our members' needs for tomorrow. Today, more than at any time in the alliance's history, we have a diverse membership. The majority of our members juggle careers or extensive community work with raising a family and keeping a home. Our alliance is striving to keep the traditions of the past intact while responding to the changing needs of our membership. Our direction will be more goal-oriented and time-efficient. Our board meetings will be streamlined to accommodate employed spouses and parents of young children, without losing our educational and interactive traditions.

We must get the word out to physicians and spouses that the KMS Alliance's programs are an important part of their community, state and nation. We are people with common goals: to better our communities through our health projects, to better our medical schools through AMA-ERF, and to better social causes through legislative efforts. We must all work on membership to achieve our goals.

I look forward to working closely with Dr. Warren and the medical society this year, and I am honored to be the President of the Kansas Medical Society Alliance. Thank you.

Lisa Barker

Official Proceedings of the 1995 KMS House of Delegates

At 8:00 a.m. on Friday, May 5, 1995, the Kansas Medical Society and the Kansas Medical Society Alliance met for a joint opening ceremony for their respective annual meetings at the Doubletree Hotel, Overland Park, Kansas. Speaker of the KMS House D.W. Bell, M.D., introduced a U.S. Marines color guard, who presented the colors for the pledge of allegiance. Dr. Bell introduced Cranston Cederlind, M.D., Chairman of the Annual Meeting Planning Committee, who welcomed the delegates and guests to Overland Park on behalf of the host society, Johnson County, and urged everyone to attend the AMA-ERF Auction that evening.

The Speaker recognized Joseph C. Meek, Jr., M.D., who thanked the hosts of the Thursday homes tour and luncheon for their hospitality.

KMSA President Nancy Craig introduced a special guest, the President-Elect of the AMA Alliance, Sandra Mitchell, Kansas City, Missouri. Mrs. Mitchell praised the joint opening ceremony, citing it as symbolic of the cooperation of physicians and spouses working together. She outlined several projects of the national organization that address their anti-violence initiative. One is a new book for children that teaches conflict resolution. Mrs. Mitchell described the Alliance's new SAVE (Stop America's Violence Everywhere) program, which will soon be publicized with a large rally in Chicago. The Alliance is working to end violence against children, spouses and the elderly. "Who better to address this problem than physicians and their spouses?" she asked. On behalf of the more than 60,000 AMA Alliance members, she thanked Kansas physicians for all they do to help.

Mrs. Craig addressed the assembly, noting that since she is from a medical family she would use a familiar tool to describe the KMSA: a medical record. She presented a profile of a healthy "patient." Age: 70. Date of birth: 1925. Occupation: Improving the health of all Kansans. Summary of activities during the past year: A focus on AMA-ERF fund-raising. Conclusion: The patient is in excellent health. Mrs. Craig added a personal note, thanking everyone for support throughout the year.

KMS President Donald R. Brada, M.D., introduced AMA Trustee Palma (Pam) Formica, M.D., of New Jersey. Noting that she would be in attendance all weekend, he encouraged everyone to take the opportunity to visit with her.

Dr. Formica told the delegation that she was particularly glad to be back in Kansas for the installation of KMS' first woman president. On behalf of the AMA, she conveyed greetings and thanks to the Alliance. Dr. Formica said that when she heard about Heartland Health on her last visit to Kansas, she was skeptical and has been "amazed" at its success. She congratulated the Kansas Medical Society for its leadership role in health care reform. This, she said, "puts the society on the cutting edge" of medicine. Dr. Formica presented a stewardship report on behalf of the AMA Trustees, whom she characterized as providing servant leadership: "We on the board are your servants." Following a recent study of its operations, the AMA is consolidating so it can offer better service. AMA Television was sold. The AMA is now examining the component system to determine what discourages non-members from joining. There will be a report on this subject at the Annual Meeting in June.

"We must be more sensitive to the needs of our constituents," Dr. Formica declared, adding that trustees are available for visits, if desired. A young physician (under 40) will be added to the board this year, and the board is becoming more diverse overall. The AMA is working closely with the HMSS, and their new Orion Project will take representatives to rural hospitals to offer assistance. Dr. Formica reported that there will be no AMA dues increase this year.

Current public initiatives include anti-violence, anti-smoking, and AIDS education.

Finally, Dr. Formica reported that AMA Executive Vice President James Todd, M.D., is retiring next year. A search is beginning for his successor, and nominations are welcome.

The Speaker invited Dr. Brada to give the President's report. Dr. Brada noted that it had been one year since he had been entrusted with this responsibility. Now that it was almost over, he felt both glad and sad. He thanked his wife, Kay,

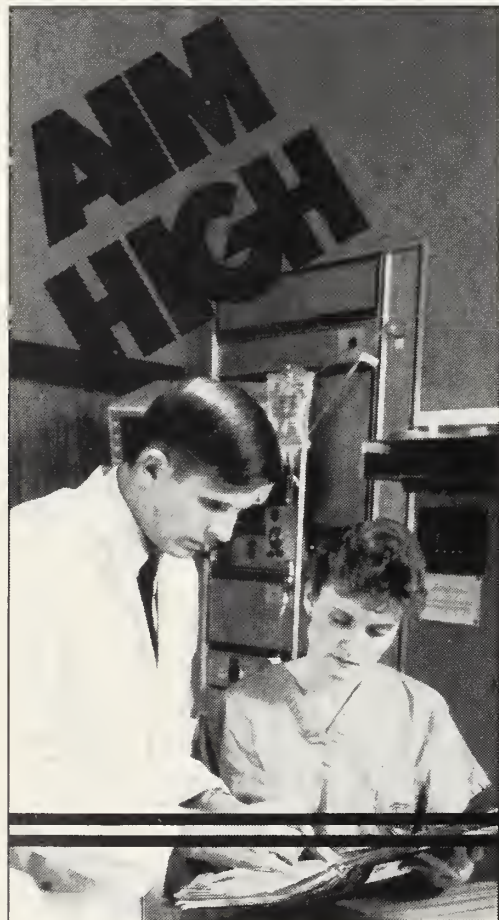
for her advice and companionship. The KMS presidency, he said, is much like a sailing ship. To win the race, one must have a sound, stable, fast ship. The crew (staff and officers) must work together as a team. Dr. Brada reviewed the highlights of the past year. He had taken gratifying trips to 17 council districts, accompanied at various times by Jerry Slaughter, Chip Wheelen, Carolyn Price and Allison Peterson. Some trips took him to places he hadn't seen before. He regretted he could not visit all the physicians in the state. A major accomplishment was the passage last year, after heated discussion, of Resolution 94-15, which authorized Heartland Health. A great amount of time and effort to implement the network followed. Dr. Brada called for applause to recognize the efforts of Jerry Slaughter. The regular business of the medical society went on, Dr. Brada noted, despite the efforts of starting Heartland Health.

The future is difficult to predict, Dr. Brada observed. Heartland Health is a success, but it is still in its infancy. The real test is still to come. How, he asked, will we deal with the hard issues,

such as policing ourselves? Efficiency is called for, balanced with good patient care. What role will we play in the growth of "mega-organizations?" Will we be mere providers, or will we assert ourselves to insist on what our role should be? In this regard, the county societies "need to get their heads out of the sand." The strength of physicians' organizations, Dr. Brada said, relates to their success in changing the health care arena. These organizations should be the county societies.

Heartland Health and KaMMCO can help to keep the state society viable, and the AMA "can and does represent all of us." We need to put our efforts into the AMA to find solutions, Dr. Brada observed. Stewardship has been one of his themes this year. "We are stewards of health care to make sure it works for our patients," he said. We must have a willingness to be accountable, and to prepare the next generation for the transfer of responsibility to them. Finally, he thanked the members for the opportunity to serve as their president.

The Speaker encouraged the delegates to visit



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the vendors' booths in the hallway outside when leaving the room. She announced that the first House of Delegates would convene in a few minutes.

FIRST SESSION

Speaker of the House D. W. Bell, M.D., called the first session of the 136th KMS House of Delegates to order at 9:19 a.m. and introduced the Vice Speaker, Robert Barnett, M.D. Dr. Bell explained the composition of the house, outlined the rules and procedures that would be followed, and noted that *Davis' Rules of Order* would be followed during the meeting. Only delegates would be recognized and allowed to vote. All others should convey their opinions to their delegates. Dr. Bell announced that the Reference Committee would meet immediately following the first session. The presence of a quorum was announced, and the minutes of the 1994 House of Delegates, published in the June 1994 issue of KANSAS MEDICINE, were approved.

Dr. Brada outlined the procedure to be followed for the primary election, if it were necessary to conduct one. He read the slate:

President Elect: David K. Ross, M.D., Arkansas City
First Vice President: Joseph T. Philipp, M.D., Manhattan
Second Vice President: Jimmie Browning, M.D., Clay Center; Cranston Cederlind, M.D., Shawnee Mission
Constitutional Secretary: Craig Concannon, M.D., Beloit
Treasurer: Anne (Katie) Rhoads, M.D., Olathe; Howard Wilcox, Jr., M.D., Hays
Speaker: Dee W. Bell, M.D., Shawnee Mission
Vice Speaker: Robert Barnett, M.D., Topeka
AMA Delegate: Jimmie A. Gleason, M.D., Topeka
AMA Delegate: Linda D. Warren, M.D., Hanover
AMA Alternate Delegate: Terry Poling, M.D., Wichita
AMA Alternate Delegate: Joseph C. Meck, Jr., M.D., Wichita

There were no nominations from the floor. Since there were no more than two candidates for any one office, it was not necessary to hold a primary election. The election will be held during the second session.

Dr. Barnett called for committee reports, announcing that some were submitted as written reports and placed in the delegates' notebooks.

Treasurer —

Jimmie Browning, M.D.

This report is included in the delegates' notebooks.

Constitutional Secretary — Craig Concannon, M.D.

Kansas Medical Society Membership				
	April 26 1995	Year- End 1994	Year- End 1993	Year- End 1992
ACTIVE	2429	2347	2248	2215
ACTIVE 2ND YEAR	66	87	77	63
ACTIVE 1ST YEAR	83	40	35	8
PROBATIONARY	74	60	57	89
RESIDENT	283	82	279	86
STUDENT	341	344	223	315
ASSOCIATE	49	49	44	43
PERSONAL EXEMPT	27	11	8	8
RETIRED	521	510	507	491
MILITARY SERVICE	0	0	1	1
MILITARY EXEMPT	0	0	1	1
EMERITUS	55	52	55	57
HONORARY	2	2	2	1
SEMI-RETIRED	5	3	2	0
OSTEOPATHIC ASSOC.	60	17	0	0
TOTALS	3995	3804	3539	3598

Necrology —

Warren E. Meyer, M.D.

Dr. Meyer requested a moment of silent remembrance following the reading of the names:

Name and City	Age	Date of Death
Winstan L. Anderson, M.D., <i>Sun City W., AZ</i>	85	7/15/94
Raymond J. Beal, M.D., <i>Fredonia</i>	82	10/17/94
Floyd C. Beelman, M.D., <i>Topeka</i>	92	11/8/94
Harry J. Bowen, M.D., <i>Topeka</i>	83	10/12/94
C. Everett Brown, M.D., <i>Fort Worth, TX</i>	84	8/25/94
Bernard A. Brungardt, M.D., <i>Salina</i>	73	1/19/95
Emery C. Bryan, M.D., <i>Erie</i>	89	1/29/94
Ralph E. Bula, M.D., <i>Hays</i>	82	8/1/94
Clair J. Cavanaugh, M.D., <i>Great Bend</i>	71	12/26/94
Alexander R. Chalian, M.D., <i>Kansas City</i>	91	12/12/94
Thomas J. Coleman, M.D., <i>Wichita</i>	76	9/24/94
Ralph Lafayette Drake, M.D., <i>Wichita</i>	94	9/22/94
Clarence Leroy Francisco, M.D., <i>Leawood</i>	84	7/29/94
Frederick A. Gans, M.D., <i>Salina</i>	72	9/19/94
Raymond F. Gard, M.D., <i>Redding, CA</i>	91	11/2/92
George Franklin Gsell, M.D., <i>Wichita</i>	86	5/20/94
Francis J. Hagan, M.D., <i>Wichita</i>	79	3/17/93
Thomas H. Hays, M.D., <i>Wichita</i>	45	7/7/94
Alfred H. Hinshaw, M.D., <i>Wichita</i>	86	4/29/94
John B. Jarrott, M.D., <i>Hutchinson</i>	77	7/14/94
Rodger S. Kirkegaard, M.D., <i>Topeka</i>	64	12/17/94
Kenneth McLain, M.D., <i>Ransom</i>	73	4/18/95
Ira R. Morrison, M.D., <i>Atchison</i>	85	3/5/93
Malcolm C. Murfitt, M.D., <i>Lindsborg</i>	81	10/19/94
Fredrik Furman Nyberg, M.D., <i>Towanda</i>	71	12/30/93
Marvin Miles Palmer, M.D., <i>Leavenworth</i>	49	11/18/94
Kenneth Dean Powers, M.D., <i>Wichita</i>	70	5/31/94
Maurice F. Priddy, D.O., <i>Junction City</i>	63	7/24/94
Ralph G. Robinson, M.D., <i>Kansas City</i>	57	9/2/94

Jack L. Ross, M.D., <i>Topeka</i>	62	4/17/95
George M. Sabin, Jr., M.D., <i>Wichita</i>	82	2/17/95
Daniel K. Roberts, M.D., <i>Wichita</i>	57	6/23/94
Leland N. Speer, M.D., <i>Kansas City</i>	82	12/1/94
Charles Raymond Svoboda, M.D., <i>Chapman</i>	75	5/27/94
William Tarnower, M.D., <i>Topeka</i>	73	8/31/94
Ernest J. Ubelaker, M.D., <i>South Haven</i>	83	11/16/94
Nathaniel Uhr, M.D., <i>Topeka</i>	94	10/10/94
Stanley Leroy Vander Velde, M.D., <i>Emporia</i>	77	1/22/94
Clarence N. ("Jack") Waters, M.D., <i>Salina</i>	81	4/21/95

Editorial Board —

Warren E. Meyer, M.D.

At the last meeting of the Kansas Medical Society House of Delegates, Resolution 94-16 was passed. This instructed the Executive Committee, in consultation with the Editorial Board of KANSAS MEDICINE, to develop a new format for the journal that would maintain the scientific content while adding more news, socioeconomic stories and practice-related features. The changes were to be initiated in January 1995.

As a result of frank and open discussions, the decision was made to publish KANSAS MEDICINE quarterly, to make the annual Membership Directory a supplement to the journal, rather than a numbered issue of it, and to expand the *KMS Newsletter* to include the KMS and KMS Alliance Presidents' columns, as well as current socioeconomic and practice-related news items.

KANSAS MEDICINE remains a peer-reviewed publication. As in past years, it provides both scientific and feature articles. The Spring issue contains a traditional mix of scientific articles and columns. The Summer issue will feature papers from the Human Genome Ethics Conference held in Wichita in March, as well as the proceedings from the KMS Annual Meeting. The 20th anniversary of the University of Kansas -Wichita Campus will be the cover story of the Fall issue and will feature a history of the school and several scientific articles by its faculty.

Last November we inaugurated "The Horse and Buggy Doctor," a series of excerpts from the book of the same name by Dr. Arthur E. Hertzler. These anecdotes recount his life from childhood through medical training, career and retirement. The many contrasts — and similarities — between medicine then and now are interesting and illuminating. We hope you enjoy them.

We are always seeking interesting artwork with a Kansas flavor for the journal covers. J. R. Hamil

remains one of our favorites and, judging from the mail, he is one of yours. We will continue to review his new paintings for future covers. In the past year, we have introduced to KANSAS MEDICINE readers the work of several other fine regional artists, including Stephen Miner of Wichita; Phil Epp, formerly of Newton; Jim Brothers of Lawrence; and Vernon Brejcha of Lawrence.

The Editorial Board is interested in making the journal your publication and, therefore, we invite your comments, criticism and advice. Please let your views be made known.

No report would be complete without acknowledging the behind-the-scenes work of Susan Ward, recently elevated to the well deserved title of Managing Editor of KANSAS MEDICINE. Her editing skills have made my columns and, I am sure, the columns of our other contributors more polished, more readable and, we think, more interesting. She has done yeoman's work as the journal has gone through its metamorphosis, and we cannot thank her enough for her efforts on your behalf to keep KANSAS MEDICINE as your magazine.

KaMMCO —

Jimmie A. Gleason, M.D.

KaMMCO continues to grow and now has 40% of the Kansas market. The rate of growth was about 10% in 1994. Dr. Gleason thanked those delegates who are KaMMCO insureds. KaMMCO had three cases in court at the end of April. One was thrown out, and KaMMCO won the other two. The KaMMCO staff represents physicians to the best of their ability. The company is working for more tort reform. Managed care is coming, Dr. Gleason warned, and physicians should be on guard for related insurance issues. He advised physicians to scrutinize contracts to be sure they are in one's best interest. KaMMCO held over 50 programs last year to help physicians do a better job. The company remains "an advocacy organization that just happens to sell insurance." In its six-year existence, it has changed the medical malpractice insurance climate in Kansas. In conclusion, Dr. Gleason thanked the members for their support.

Heartland Physicians' Health Network — Jay Schukman, M.D.

Dr. Schukman thanked Dr. Kermit Wedel, Chairman of the Heartland Board, for his service to

date. There are now 1,878 physician members, and \$7.8 million has been raised. The company is ahead of schedule and is now finishing its organizational stage. The staff will soon call on hospitals statewide. The market continues to change, and buyers are more sophisticated. Tremendous opportunities exist, Dr. Schukman noted, and "success will depend on you." Physicians will have access to the entire premium dollar in the future. Dr. Schukman introduced Bruce Gosser, Acting Chief Operating Officer, who will be available throughout the meeting to speak with physicians.

**Executive Director —
Jerry Slaughter**

Mr. Slaughter stated that it is a pleasure to be associated with KMS. He highlighted the year's activities, noting that the AMA, as exemplified by Dr. Formica, works hard on physicians' behalf. Dr. Brada has been a delightful person to work with, "a gentle spirit with a firm hand." This is a time of transition, with KMS' first woman president. Mr. Slaughter hopes more women will become involved with organized medicine. He introduced the members of the KMS staff and thanked them for their hard work. He praised the work of KaMMCO and MSC.

At last year's meeting, Mr. Slaughter recalled, he told the physicians they need to believe in themselves. Most people said Heartland Health was impossible, but now a significant step has been taken toward its success. There are difficult decisions ahead, but eventually the effort will produce good results. Sometimes, he noted, to be a participant and gain autonomy, one must take risks. Starting Heartland Health is an appropriate role for the society. "You hold the key to your success," he told the delegates.

This is the beginning of his 23rd year with KMS, and it is "home." In closing, Mr. Slaughter thanked the delegates for the privilege of working for KMS.

The Speaker called for unfinished business. There was none.

The Speaker invited new business. Resolution 95-6 was withdrawn by its originator. Dr. Brada introduced Resolution 95-30, "Commendation of Nancy Sullivan"; 95-32, "Commendation of Gary Caruthers"; and 95-33, "Commendation Honoring the 70th Anniversary of KMS Alliance." Dr. Brada requested a suspension of the rules of the house in order to take this resolution

to the Alliance before Sunday. This requires a two-thirds vote of the house. Dr. Brada read the resolution, and it was adopted by acclamation.

Dr. Barnett introduced Resolutions 95-31 and 95-34, and they were referred to the Reference Committee.

The rules for Council District elections were read. Districts needing to conduct elections are 6, 7 and 10.

An invitation was extended to all delegates to attend the Reference Committee meeting immediately following the First House of Delegates. Members of the Reference Committee are: Anne (Katie) Rhoads, M.D., Chairman; Jimmie Browning, M.D.; Craig Concannon, M.D.; Howard Wilcox, M.D.; and Robert Yoachim, M.D.

Following several announcements, the meeting was adjourned at 10:10 a.m.

SECOND SESSION

The Second Session of the KMS House of Delegates was called to order by Speaker D. W. Bell, M.D., at 8:03 a.m. on Sunday, May 7, 1995. Rules by which the meeting would be conducted were reviewed, and the presence of a quorum was announced. Election ballots were distributed, and the Speaker named the Tellers: Newton C. Smith, M.D., Arkansas City; Perry N. Schuetz, M.D., Great Bend; and Russell D. Etzenhouser III, M.D., Shawnee Mission.

While the ballots were being distributed, the Speaker announced that evaluation forms regarding the expanded meeting format would be distributed for completion prior to departure.

The Speaker asked Reference Committee Chairman Anne (Katie) Rhoads, M.D., Olathe, to present the committee's report. Dr. Rhoads read the committee's recommendations for each resolution, and Dr. Bell invited discussion and voting by the delegates. (Results of these actions are printed below.) Dr. Bell thanked the Reference Committee for its work.

Executive Dean Daniel Hollander, M.D., of the University of Kansas Medical Center, was introduced by Dr. Bell. Dr. Hollander gave a presentation on the future of health care, focusing on managed care and the pros and cons of capitation. He noted that both the medical school and practicing physicians need to develop a new approach focusing on prevention, attention to basic issues, a team approach including allied health personnel, and generalists and specialists working together. The curriculum at KUMC is becoming

patient-centered, with an emphasis on prevention and outcomes measures. The school is rethinking traditional approaches. He advised physicians to learn to enjoy change, discard outmoded concepts, establish new partnerships, explore new areas and put patients first. A question-and-answer period followed Dr. Hollander's presentation.

Dr. Bell introduced KMS Past President Joseph C. Meek, Jr., M.D., the Dean of the University of Kansas Medical School -Wichita Campus.

The election results were announced:

PRESIDENT ELECT: David K. Ross, M.D., Arkansas City

FIRST VICE PRESIDENT: Joseph T. Philipp, M.D., Manhattan

SECOND VICE PRESIDENT: Jimmie L. Browning, M.D., Clay Center

CONSTITUTIONAL SECRETARY: Craig Concanon, M.D., Beloit

TREASURER: Anne C. Rhoads, M.D., Olathe

SPEAKER: Dee W. Bell, M.D., Shawnee Mission

VICE SPEAKER: Robert E. Barnett, M.D., Topeka

AMA DELEGATE: Jimmie A. Gleason, M.D., Topeka

AMA DELEGATE: Linda D. Warren, M.D., Hanover

AMA ALTERNATE DELEGATE: Terry L. Poling, M.D., Wichita

AMA ALTERNATE DELEGATE: Joseph C. Meek, Jr., M.D., Wichita

Dr. Bell recognized Douglas Young, M.D., Wichita, to make a special presentation on behalf of the Medical Society of Sedgwick County. Dr. Young presented a bronze falcon to Dr. Brada in gratitude for his service as KMS President.

The Speaker called for unfinished business. There was none.

Dr. Bell introduced the Society's new President, Linda D. Warren, M.D., who stated that she is honored to serve as President. She spoke of the changes and challenges that lie ahead, and of her beliefs and plans for the year. (The full text of her speech is printed on page 71.)

Dr. Warren announced the newly elected Councilors:

District #6: Thomas T. Coolidge, M.D., Topeka

District #7: (pending)

District #10: Kenneth K. Kimmel, M.D., Halstead

Dr. Warren installed the re-elected Speaker, Dee W. Bell, M.D., and Vice Speaker, Robert E. Barnett, M.D.

The Speaker announced that the next meeting of the House of Delegates will be May 2-6, 1996, at the Ramada Inn in Hutchinson. Following several more announcements, the meeting was adjourned at 10:00 a.m.

Resolutions

Those resolutions that were not adopted but were referred for further study or information are so indicated. The resolutions that failed to pass are retained in the official minutes at the executive office, but are not reported here. An asterisk following the resolution number indicates a change in the Constitution and By-Laws.

RESOLUTION 95-1

Expiration of 1990 Resolutions

Not adopted.

RESOLUTION 95-2

Task Force on Practice Issues

WHEREAS, Attempts by non-physicians to expand their scopes of practice into what has traditionally been the practice of medicine are increasing with the advent of a changing health care marketplace; and

WHEREAS, There is a growing trend among mid-level practitioners to seek greater clinical and economic independence from physicians with whom they have had supervisory or collaborative relationships in the past; and

WHEREAS, Recent court opinions and administrative decisions by agencies which regulate health care providers have created uncertainty and confusion over what constitutes the practice of medicine and surgery; and

WHEREAS, The quality of care rendered to patients by physician extenders is to a great degree dependent on the quality of the supervision provided by the physician; and

WHEREAS, As the nature of the relationships between physicians and other providers has evolved due to the changes in the health care marketplace, physicians are seeking guidance as to the appropriateness of certain supervisory or collaborative arrangements; therefore be it

Resolved, That the Kansas Medical Society reaffirm its opposition to the practice of medicine by individuals who are not licensed to practice medicine and surgery; and be it further

Resolved, That the KMS Executive Committee appoint a Task Force on Practice Issues to conduct a study on, but not limited to, the following:

1. Defining the practice of medicine and surgery;
2. The appropriateness of supervision of mid-level practitioners;
3. The use of protocols with ancillary personnel;
4. The basis and rationale for regulation of health care providers through state law;
5. The scope of medical education compared to the education of non-physician providers;
6. The structure of the Healing Arts Board, and alternatives to the current system of multiple administrative licensing agencies; and be it further

Resolved, That representatives of the specialty societies, Kansas Association of Osteopathic Medicine, Kansas Foundation for Medical Care, KaMMCO and Heartland Health be invited to recommend physicians for appointment to the Task Force; and be it further

Resolved, That the Task Force report on the progress of its study and deliberations at the September Council meeting, and that a final report be presented at the next meeting of the House of Delegates.

RESOLUTION 95-3

Kansas Foundation for Medical Care — Endorsement

WHEREAS, Continued and active physician involvement is necessary to achieve the intended goals of the Medicare Utilization Review Program; therefore be it

Resolved, That the KMS continue to endorse the Kansas Foundation for Medical Care as the Professional Review Organization for Kansas for the coming year, and be it further

Resolved, That the KMS endorsement be reviewed on an annual basis.

RESOLUTION 95-4

Caring Program for Children

WHEREAS, The Kansas Medical Society is dedicated to improving the health of the people of Kansas, and

WHEREAS, Many Kansas children live in homes with limited family income and have no access to

health care insurance and, consequently, suffer from the limited access to health care, and

WHEREAS, The Caring Program for Children was an initiative created jointly by the Kansas Medical Society, the Kansas Hospital Association and Kansas Blue Cross/Blue Shield to offer the community an opportunity of providing health care to children with no other insurance access, and

WHEREAS, This program has been endorsed by KMS and several component medical societies, has been well received by physicians and the communities and has provided health insurance for deserving children across the state; therefore be it

Resolved, That this House of Delegates endorses the continued commitment of the Kansas Medical Society to the Caring Program for Children, and be it further

Resolved, That the KMS Alliance be encouraged to continue their support of this program; and be it further

Resolved, That physicians of Kansas personally and collectively support this program and encourage their local community to become involved.

RESOLUTION 95-5

Substance Abuse

Resolved, That the Kansas Medical Society reaffirm the medical profession's strong opposition to the abuse of alcohol, tobacco and illicit drugs, because of their deleterious effects on human health, and be it further

Resolved, That physicians on an individual basis be more cognizant of the potential for substance abuse in their evaluation of patients and be encouraged to discuss these problems openly with their patients, and be it further

Resolved, That the Kansas Medical Society strongly support and encourage the Kansas University School of Medicine to initiate and/or strengthen their current efforts to educate medical students and residents regarding the identification, treatment and prevention of substance abuse problems, and be it further

Resolved, That during the coming years, continuing medical education programs for physicians should include topics to inform all practicing physicians regarding the magnitude of substance abuse problems, as well as the recognized diagnostic and treatment modalities available in identifying and managing substance abuse problems.

RESOLUTION 95-6

Withdrawn prior to House of Delegates

RESOLUTION 95-7

Evaluation of Physical Impairment

WHEREAS, The Kansas Legislature enacted reforms of the workers compensation laws in 1993, and

WHEREAS, One of those reforms established uniformity in determining the extent of impairment of an injured worker, and

WHEREAS, That section of the Workers Compensation Act refers to the third edition, revised, "Guides to Evaluation of Permanent Impairment," published by the American Medical Association, and

WHEREAS, The "Guides to Evaluation of Permanent Impairment" has been updated to reflect the most contemporary medical knowledge on the various subjects contained therein, and

WHEREAS, Ratings as determined by use of the third edition, revised, may be unduly inflated, thus significantly increasing workers' compensation costs, since the ratings are based on range of motion limitations alone, in the absence of other neurologic or orthopedic pathology, and

WHEREAS, Ratings as determined by the use of the fourth edition are based on diagnosis-related estimates, thus providing a more universally consistent and definitive rating which will bring about a reduction of workers' compensation expenditures, therefore be it

Resolved, That the Kansas Medical Society call upon the Kansas Legislature to amend the Workers Compensation Act to reference the fourth edition of the "Guides to Evaluation of Permanent Impairment," in lieu of the third edition, revised, for the purposes of assuring application of up-to-date medical knowledge in the performance of impairment evaluations among injured workers.

RESOLUTION 95-8

Treatment of Injured Workers

WHEREAS, The 1993 Kansas Legislature enacted a comprehensive workers' compensation reform bill, and

WHEREAS, one section of the workers' compensation law requires a schedule of maximum medical fees, and

WHEREAS, That section of the law also requires that the schedule of maximum fees shall be sufficient to ensure accessibility to necessary treatment for injured workers, and

WHEREAS, That section of the law also provides for an advisory panel to assist the Director of Workers' Compensation regarding the schedule of maximum medical fees, and

WHEREAS, The schedule of maximum medical fees established in 1993 has become obsolete and inadequate, and

WHEREAS, The current Workers' Compensation Act provides that "The schedule of maximum fees shall be reviewed annually by the director to assure that the schedule is current, reasonable and fair," and

WHEREAS, The advisory panel has recommended a general increase in all fees under the schedule, as well as correction of those fees which were not properly scheduled in 1993, therefore be it

Resolved, That the Kansas Medical Society call upon the Director of Workers' Compensation to update the schedule of maximum medical fees on an annual basis, as called for in the Workers' Compensation Act, to assure that the schedule of fees is current, reasonable and fair.

RESOLUTION 95-9

Disciplinary Hearings Conducted by Kansas State Board of Healing Arts

WHEREAS, While concurring with the Kansas State Board of Healing Arts' statutory responsibility for holding formal hearings and the need for physicians to serve as witnesses at these hearings, concern has been raised by physicians regarding the board's use of outside plaintiffs' attorneys in conducting these hearings in which these hearings are conducted in a contentious, antagonistic and unnecessarily confrontational manner, and

WHEREAS, At least one defense attorney has raised concerns regarding the implications and use of unauthorized testimony presented at these hearings, and

WHEREAS, It is believed that disciplinary hearings involving professional incompetence or preliminary investigations by the board should not be conducted at the same time as when legal action on the same issues is being prosecuted in a court of law, therefore be it

Resolved, That the Kansas Medical Society's legal counsel review the Kansas Administrative Procedure Act and the appropriateness of its application to hearings conducted by the Kansas Board of Healing Arts, and be it further

Resolved, That a report, with any necessary recommendations, be presented to the September

meeting of the Council for consideration and action.

RESOLUTION 95-10

Maternal and Infant Care

WHEREAS, The provision of prenatal care and the delivery of newborns is considered to be the practice of medicine by the majority of the scientific medical community, and

WHEREAS, The State of Kansas has a responsibility to assure the public that these services are provided by qualified persons in a medically appropriate environment, and

WHEREAS, In various areas of Kansas these services are currently being provided by persons who are not held legally accountable, and

WHEREAS, Recent court decisions have raised questions as to whether or not the provision of prenatal care and the delivery of newborns fall within the statutory description of the practice of medicine, therefore be it

Resolved, That the Kansas Medical Society initiate action to promote and protect the safety and well-being of pregnant women and newborns by requesting an amendment to the Healing Arts Act which clearly states that obstetrics constitutes the practice of medicine and surgery, and be it further

Resolved, That a copy of this resolution be sent to the Task Force on Practice Issues, and be made a part of its study.

RESOLUTION 95-11

Collection and Reporting of AMA Membership Dues

WHEREAS, The current AMA policy regarding the billing for delinquent AMA dues causes confusion and ill will among the federation membership, and

WHEREAS, Some members, although having paid their dues, are notified by the AMA in March that payment of their AMA dues is delinquent. This is because of the AMA's schedule for delinquent billings, which begins as early as March 6th. This is further complicated because of the necessary processing and time delays associated with the conveyance of the information and dues by the local and state societies, and

WHEREAS, This problem could be resolved by changing the AMA's delinquent billing dates and by more effective and coordinated reporting efforts by state and county societies, therefore be it

Resolved, That the Kansas Medical Society's

Executive Committee be instructed to submit to the AMA's House of Delegates at their 1995 annual meeting, a resolution calling for a review of the AMA's delinquent dues billing procedures and implementation of the necessary action which will resolve the current problems associated with the collection, reporting and conveyance of AMA dues, and be it further

Resolved, That the corrective actions be implemented prior to the billing for 1996 membership dues.

RESOLUTION 95-12

Relationships Between Physicians and Pharmacists

Not adopted; referred to the Task Force on Practice Issues.

RESOLUTION 95-13

Medical Records

WHEREAS, Patients have a right to know information about their medical care which is contained in records maintained by treating physicians and hospitals; and

WHEREAS, Medical offices customarily release a copy or summary of a patient's medical records relating to services provided through that office to another physician when properly requested and authorized; and

WHEREAS, Some medical offices will not release a copy or summary of medical records contained in the patient's file which have been received from the patient's previous treating physicians, hospitals, etc.; and

WHEREAS, Failure to transfer medical records to another physician or to a patient's legally designated representative when requested by the patient to do so is defined as unprofessional conduct under the Healing Arts Act; and

WHEREAS, There is growing concern about the costs and charges for duplication of medical records; and

WHEREAS, There is confusion about a physician's ethical and legal responsibility to release or transfer information gathered from previous treating physicians; therefore be it

Resolved, That the Kansas Medical Society initiate discussions with the Kansas Hospital Association, Kansas Bar Association, and KaMMCO for the purpose of developing guidelines on the legal, ethical and economic issues surrounding the release, transfer and duplication of medical records; and be it further

Resolved, That any guidelines developed by the study group must be approved by the House of Delegates or the Council prior to receiving KMS endorsement.

RESOLUTION 95-14

Preserving the Community of Physicians

WHEREAS, Physicians' ethical, professional and moral standards are being tested at all levels by the economic consequences of the managed health care market, and

WHEREAS, Solo physician practices are becoming a way of the past, and

WHEREAS, The present health care climate encourages increasing consolidation of physician practices as a result of economic considerations, and

WHEREAS, The present economic forces in managed health care create divisiveness based on specialty, geographic, and economic considerations, and

WHEREAS, There is a need for all physicians to stand together in an inclusive organization which exists to strengthen their ethical and professional standards, and support their continued patient advocacy in the face of increasing economic pressures; and

WHEREAS, County and state medical societies exist to support physicians and their patients; therefore be it

Resolved, That the Kansas Medical Society appoint a committee to work towards strengthening physician unity at the county and state level.

RESOLUTION 95-15

Educating the Public and Profession About Managed Care

WHEREAS, The health care system is currently undergoing profound changes, driven by a marketplace demanding managed care products, and

WHEREAS, It is estimated that in the near future managed care will be the dominant form of health care delivery, and

WHEREAS, The term "managed care" covers a broad spectrum of delivery models which can be confusing to the public and physicians alike, and

WHEREAS, The public looks to physicians, as leaders in the health care field, for information and guidance about evolving health care delivery models, therefore be it

Resolved, That the Kansas Medical Society develop a program to enhance the understanding of both the profession and the public about the

implications of moving to a health care system dominated by managed care, and be it further

Resolved, That the Mathematica study be used as a reference, and be it further

Resolved, That the KMS Executive Committee be directed to develop and implement the educational effort provided for in this resolution.

RESOLUTION 95-16

Concepts Within Family Health Care Preservation Act

WHEREAS, The issues of portability, permanence, and pre-existing illness are a concern to Americans, therefore be it

Resolved, That the Kansas Medical Society share the concepts within the Family Health Care Preservation Act of 1995, which are condensed in its executive summary, with its members for discussion.

Executive summary attached.

I. ENHANCE SECURITY FOR THOSE PRESENTLY INSURED BY MAKING PRIVATE INSURANCE PORTABLE AND PERMANENT:

Portability:

To enhance the capacity of American workers to change jobs without losing their health insurance coverage, existing law under COBRA (which allows individuals temporarily to continue their health insurance coverage after leaving their place of employment by paying their premiums directly) would be modified to allow individuals two additional lower cost options to keep their health insurance coverage during their transition between jobs.

Workers could:

- (A) Continue their current coverage during the 18 months covered by COBRA by paying their insurance premiums directly;
- (B) Continue their current insurance coverage during the 18 months covered by COBRA by paying their insurance premiums directly, but with a lower premium reflecting a \$1,000 deductible; or
- (C) Continue their current insurance coverage during the 18 months covered by COBRA by paying their insurance

payments directly, but with a lower premium reflecting a \$3,000 deductible.

With these options, the typical monthly premium paid for a family of four would drop by as much as 20% when switching to a \$1,000 deductible and as much as 52% when switching to a \$3,000 deductible. Also, premium payments made by families would now be deducted from income in the manner described in title II of this bill.

In addition, individuals would be permitted to make penalty-free withdrawals from their individual Retirement Accounts and 401(k)s to pay for health insurance coverage during the transition period. The transition period of coverage would end once a person is in a position to get coverage from another employer.

Permanence

Health insurance would be made permanent (belonging to the family or individual) by these three reforms:

Those with Individual Coverage:

- (A) No existing health insurance policy can be canceled due to the state of health of any person covered by the policy. Insurance companies must offer each policy holder the option to purchase a new policy under the conditions of part B of this section with the terms to be negotiated between the buyer and seller of the policy.
- (B) All individual health insurance policies written after the enactment of this legislation must be guaranteed renewable, and premiums cannot be increased based on the health of the members covered under the group policy. In addition, similar to part A of this section, new group policies must provide each member of the group the right to convert to an individual policy when leaving the group. However, the premium charges of the individual leaving the new group plan cannot be based on the individual's state of health and cannot be canceled except for nonpayment of premiums.

Those with Employer-provided Self-funded Coverage:

- (A) Companies currently operating self-funded plans must make arrangements with one or more private insurers to offer individuals leaving the self-funded plan individual coverage. The individual policy will be rated based on actuarial data, but cannot be canceled due to the state of health of those covered by the policy.
- (B) All self-funded plans created after enactment of this legislation must (like part A of this section) make arrangements with one or more private insurers to offer individuals leaving the self-funded plan individual coverage. However, the premium charges for the individual leaving the self-funded plan cannot be based on the individual's state of health and cannot be canceled except for nonpayment of premiums.

II. A. PROVIDE EQUAL TAX TREATMENT FOR THE SELF-EMPLOYED AND UNINSURED:

Self-employed workers and individuals without employer-provided health insurance coverage will now be allowed to deduct from taxable income their medical insurance coverage costs. The 25% deduction will be retroactively restored and phased up to 100% over the next five years. The tax deduction will apply to the individual purchase of conventional health insurance, HMO coverage, Medical Savings Account contributions, or any other prepaid medical plan.

II. B. ESTABLISH MEDICAL SAVINGS ACCOUNTS TO PROMOTE COMPETITION AND CONTROL COSTS:

In combination with the purchase of a \$3,000 deductible catastrophic insurance policy, contributions to the Medical Savings Account of up to \$3,000 per year by either the employer or employee shall be tax deductible. The catastrophic policy will cover expenses such as physician services, hospital care, diagnostic tests, and other major medical expenses once the policy holder meets the \$3,000 annual deductible. Tax-free withdrawals from the Medical Savings Account could be made to pay for qualifying out-of-pocket medical expenses which may apply toward the insurance policy's deductible. If the funds in the Medical Savings Account are not spent so that as new deposits

are made, the sum grows beyond the \$3,000 deductible, the individual can invest excess tax-free in a long-term care package or withdraw the excess and treat it as income.

III. ENHANCE EFFICIENCY THROUGH PAPERWORK REDUCTION:

- (A) Medicaid, Medicare, and all other federal entities involved in the funding or delivery of health care shall standardize their health care forms and must reduce their total health care paperwork burden by 50% within two years of enactment of this legislation. The paperwork burden must be reduced by another 50% over the following three years, achieving a total paperwork reduction of 75% over a five year period.
- (B) State agencies involved in the funding or delivery of health care, like federal entities, shall standardize their health care forms. Also, like federal entities, within five years of enactment, states must reduce their total health care paperwork burden by 75% in order to remain eligible for federal health assistance.

IV. PROVIDE MEANINGFUL MEDICAL LIABILITY REFORM:

- (A) Any claim of negligence not "substantially justified" or which has been improperly advanced will result in an automatic judgment against the plaintiff rendering the plaintiff liable for the legal fees incurred by the health care provider, as well as any losses as a result of being away from the practice.
- (B) The liability of any malpractice defendant will be limited to the proportion of damages attributable to such defendant's conduct.
- (C) A health care provider can negotiate limits on medical liability with the buyer of health care in return for lower fees.
- (D) Non-economic damages cannot exceed \$250,000 adjusted annually for inflation.
- (E) Lawyers' contingency fees will be capped at 25%.
- (F) Malpractice awards will be reduced for any collateral source payments to which the claimant is entitled, and the claimant will be required to accept pe-

riodic payment as opposed to lump sum on awards in excess of \$100,000 adjusted annually for inflation.

- (G) No malpractice action can be initiated more than two years from the date the alleged malpractice was discovered or would have been discovered, and no more than four years after the date of the occurrence.
- (H) No punitive damages will be awarded against manufacturers of a drug or medical device if such drug or medical device has been approved by the Food and Drug Administration as safe and effective.

RESOLUTION 95-17

HCFA Violation of FACA

Not adopted.

RESOLUTION 95-18

Managed Care Participating Provider Contracts

WHEREAS, Physician service networks (local, state, and national) are being established through the use of provider contracts for the purpose of making available and marketing physician services, and

WHEREAS, The provider contracts of some health insurance companies and managed care plans may be assigned to another entity without the knowledge or consent of the involved physician, and

WHEREAS, When such assignment is made, the participating physician may have an obligation to provide services in accordance with the provisions of the original contract (e.g., fee schedule, write-offs, and utilization review decisions) with the physician's only possible recourse being termination of the original contract should he/she disagree with the unknown assignment, and

WHEREAS, It is generally felt that unilaterally assigned contracts are not in the best interest of Kansas physicians, therefore be it

Resolved, That the Kansas Medical Society oppose the assignment of physician contracts, in whole or in part, to other entities without the consent of the involved physician, and be it further

Resolved, That the Kansas Medical Society endorse and recommend inclusion of a nonassignability statement in all provider contracts so as to indicate that the contract cannot be assigned or

transferred to another entity without the prior written consent of the involved physician, and be it further

Resolved, That this matter be referred to the Society's Third Party Liaison Committee for further review, appropriate action and dissemination among the membership of the Kansas Medical Society.

RESOLUTION 95-19

Revamping Board of Healing Arts

Not adopted; referred to the Task Force on Practice Issues.

RESOLUTION 95-20

Recognition of Special Service to Medicine by Robert A. Gollier, II, M.D.

WHEREAS, Dr. Robert Gollier, II, M.D., Ottawa, Kansas, has been a vocal and constructive member of the Kansas Medical Society, and

WHEREAS, Dr. Gollier authored Resolution 92-6 adopted by the Kansas Medical Society at an early time and with far-reaching goals for organized medicine in teaching and practice, and

WHEREAS, Dr. Gollier backed up his beliefs and words by serving on a KMS-University of Kansas School of Medicine liaison committee to further implement Resolution 92-6, and

WHEREAS, The University of Kansas School of Medicine, as reported in the K.C. *Star*, April 20, 1995, recently announced a major shift in the curriculum of the medical school endorsing all of the ideas expressed by Dr. Gollier and adopted by the KMS in Resolution 92-6, therefore be it

Resolved, That the House of Delegates at the 1995 Kansas Medical Society annual meeting recognize Dr. Robert Gollier, II, M.D., of Ottawa by applause and with a plaque for his outstanding and constructive service to the Kansas Medical Society and Kansas medicine.

RESOLUTION 95-21

Medical Necessity Determinations

WHEREAS, Third-party payers frequently perform medical necessity review of physician services, and

WHEREAS, A service that is medically necessary is commonly defined as one that is widely accepted by a peer group of practicing providers, is based on scientific criteria, is reasonably safe, is consistent with the diagnosis and treatment of the condition, is in accordance with standards

of good health care practice, and is not for the convenience of the patient or provider, and

WHEREAS, A medical necessity determination as a measurement against a peer group in accordance with standards of care is a form of peer review, and

WHEREAS, Kansas Medical Society Resolution 94-3 adopted a policy that peer-review activities among physicians constitute the practice of medicine, and

WHEREAS, Third-party payers frequently use non-physician personnel to make medical necessity determinations, and

WHEREAS, New regulations to be adopted by the Kansas Insurance Commissioner will establish professional standards for personnel involved in medical necessity determinations, and

WHEREAS, The regulations will stipulate that only a physician may declare that a physician-directed medical service is not necessary, and

WHEREAS, Federal law prevents the Insurance Commissioner from regulating certain self-insured employee health benefit plans, therefore be it

Resolved, That determination of medical necessity is a form of peer review which should be performed by physician peers, and be it further

Resolved, That a KMS task force will develop a standard definition of medical necessity and/or defined guidelines for determination of medical necessity to be utilized in this peer review, and be it further

Resolved, That the Kansas Medical Society endeavor to communicate this policy to third-party administrators and employers which self-insure employee health benefit plans.

RESOLUTION 95-22

COBRA and Managed Care

WHEREAS, The Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1986 federally mandates hospitals to perform emergency medical screening exams, and

WHEREAS, The medical screening exam must be performed on all patients presenting to the hospital, and

WHEREAS, The exam must be performed regardless of the ability to pay, and

WHEREAS, The exam must be performed independent of any guidelines promulgated by managed care organizations or third party payers, and

WHEREAS, The exam must be performed before any information regarding managed care organi-

zations is obtained, and

WHEREAS, The medical screening exam may include considerable testing, referral and treatment prior to stabilization, and

WHEREAS, The medical screening exam may generate substantial expense to the patient insured by a managed care organization, therefore be it

Resolved, That the Kansas Medical Society make known to managed care organizations their endorsement of required financial responsibility of managed care organizations for the medical screening exam, testing and referral, and recommend to the AMA that a national effort to mandate reimbursement for emergency room medical screening exams (triage) be a priority.

RESOLUTION 95-23

Podiatry Scope of Practice

WHEREAS, The Kansas Podiatric Medical Association introduced Senate Bill 55 in the 1995 legislative session, and

WHEREAS, This bill would have allowed podiatrists to amputate the foot and toes, administer general anesthetics, and utilize the term "physician" in conjunction with their name, and

WHEREAS, KMS has opposed any legislative attempts by non-physicians to practice medicine and use the term "physician," therefore be it

Resolved, That KMS reaffirm its opposition to proposed changes in the podiatry act which expand the scope of practice for podiatrists, and be it further

Resolved, That KMS reaffirm its opposition to changes that would allow podiatrists to utilize the term "physician" in conjunction with their name, and be it further

Resolved, That this resolution be sent to the Task Force on Practice Issues and made a part of its study.

RESOLUTION 95-24

Commendation of Wayne Stratton

WHEREAS, Wayne T. Stratton, J.D., has served as General Counsel to the Kansas Medical Society for 20 years; and

WHEREAS, During that time he has provided counsel of the highest quality and integrity to KMS on legal and legislative matters; and

WHEREAS, As one of the leading defense lawyers in Kansas he has served as a superb advocate for physicians in professional liability litigation; therefore be it

Resolved, That the Kansas Medical Society commends Wayne Stratton for his exemplary service to the physicians of Kansas for the past 20 years; and be it further

Resolved, That a copy of this resolution be sent to Mr. Stratton with the deepest appreciation for his efforts on behalf of the Kansas Medical Society for the past 20 years.

RESOLUTION 95-25

Supervision of Mid-level Practitioners

WHEREAS, Scope of practice issues involving non-physicians have become more and more controversial in the Legislature as the health care system moves toward managed care; and

WHEREAS, The Kansas Healing Arts Act gives broad authority to physicians to delegate acts which constitute the practice of medicine to persons working under their supervision, or in collaboration with them; and

WHEREAS, Testimony during the 1995 legislative session by a nurse practitioner alleged that some physicians were being paid solely for the purpose of providing a prescribing protocol to nurse practitioners, with no supervision or collaboration on patient care involved; and

WHEREAS, Such arrangements do not promote quality, nor are they in the best interest of patients because there is no supervision or participation by the physician in the care that is rendered; therefore be it

Resolved, That it is unethical for physicians to accept compensation from any source when it is given solely for the purpose of securing a prescribing protocol, supervisory relationship, "responsible physician" status, or other arrangement with a mid-level practitioner that does not require the active supervision, oversight, and/or involvement of the physician at reasonable and appropriate intervals in patient care rendered by the mid-level practitioner; and be it further

Resolved, That KMS develop and seek an appropriate amendment to the Healing Arts Act that would make such arrangements grounds for disciplinary action; and be it further

Resolved, That this resolution be sent to the Task Force on Practice Issues and made a part of its study.

RESOLUTION 95-26

Fees for Medical Records

(Not adopted; filed for information.)

RESOLUTION 95-27

Prescribing by Pharmacists

WHEREAS, During the 1995 legislative session HB 2216 was introduced by the Kansas Pharmacists' Association; and

WHEREAS, This bill would have allowed pharmacists to prescribe drugs pursuant to written protocols between a responsible physician and the pharmacist; and

WHEREAS, KMS opposed the legislation because it is felt that pharmacists lack the clinical training and experience necessary to prepare someone to examine, evaluate, and treat patients; therefore be it

Resolved, That KMS reaffirm its opposition to legislation which would allow pharmacists to prescribe under protocols; and be it further

Resolved, That KMS oppose any other expansion of the use of protocols with non-physician providers until an appropriate committee or task force of the KMS has had an opportunity to review the appropriateness of the use of protocols as a means of delegating acts which constitute the practice of medicine and surgery to non-physicians; and be it further

Resolved, That this resolution be sent to the Task Force on Practice Issues and made a part of its study.

RESOLUTION 95-28*

Affiliate Memberships

WHEREAS, It has been the policy of the House of Delegates that all physicians who are either insured by KaMMCO or who own stock and contract with Heartland Health must be members of the Kansas Medical Society; and

WHEREAS, Special categories of membership have been created to accommodate certain groups of physicians so that the membership requirement could be met in a reasonable and fair manner; and

WHEREAS, There is a strong possibility that both KaMMCO and Heartland will be in a position to offer services, contracts and products to non-physician health care providers in the coming months; and

WHEREAS, In order to maintain consistency of policy, it will be desirable to have those organizations become members of KMS just as physicians do, but in a non-voting membership category; therefore be it

Resolved, That the KMS Bylaws be amended by adding a new section creating an Affiliate

Membership category for non-physician individuals and entities, as follows:

1.64 Affiliate Members. Institutions, facilities, corporations or other organizations that do not qualify for other categories of membership. Affiliate members may not vote nor hold office. They may apply directly for membership, and are not required to join through a component society. Dues and assessments for Affiliate Members shall be set by the Council.

RESOLUTION 95-29

Revision of Kansas Sexual Battery Statutes

Referred to the Executive Committee for study.

RESOLUTION 95-30

Commendation of Nancy Sullivan

WHEREAS, This year is the 10th anniversary of Nancy Sullivan's employment with the Kansas Medical Society; and

WHEREAS, During the past decade Nancy has served the physicians of Kansas as an integral part of the KMS office staff; and

WHEREAS, Nancy's cheerful and competent style has contributed immensely to the work of KMS and the Alliance; therefore be it

Resolved, That the Kansas Medical Society expresses its deepest appreciation and thanks to Nancy Sullivan for 10 years of unfailingly superb work and commitment to Kansas physicians and their spouses.

RESOLUTION 95-31

Commendation of Oklahoma Physicians

WHEREAS, Oklahoma and Kansas not only are contiguous states but also share many historic and cultural ties, and

WHEREAS, Oklahoma and Kansas physicians, recognizing this common heritage, have a long-standing practice of meeting together to advance common interests at the AMA level on behalf of their respective state medical associations, therefore be it

Resolved, That the Kansas Medical Society in its annual meeting on May 5-7, 1995, extend its condolences to the families and victims of the Oklahoma City bombing of April 19, 1995, and be it further

Resolved, That the Kansas Medical Society commend the physicians of the Oklahoma Medical Association on their exemplary handling of

the medical aspects of this disaster, which is in the highest tradition of the profession, reflecting honor upon themselves and the State of Oklahoma, and be it further

Resolved, That the text of this resolution be transmitted to the Oklahoma Medical Association staff, officers and delegates from their Kansas counterparts, dated this 7th day of May, 1995.

RESOLUTION 95-32

Commendation of Gary Caruthers

WHEREAS, 1995 marks the 20th anniversary of Gary Caruthers' employment with the Kansas Medical Society; and

WHEREAS, During those two decades Gary has been an invaluable member of the KMS staff, serving the physicians of Kansas with distinction in several capacities; and

WHEREAS, Gary has been a true friend and advocate for the physicians of this great state; therefore be it

Resolved, That the Kansas Medical Society expresses its profound thanks and appreciation to Gary Caruthers for 20 years of dedicated and loyal service to the physicians of Kansas.

RESOLUTION 95-33

Commendation Honoring the 70th Anniversary of KMS Alliance

WHEREAS, The Kansas Medical Society Alliance is celebrating its 70th anniversary at this House of Delegates, and

WHEREAS, The Alliance is composed of physician spouses who utilize their many skills and talents to aid the Society in helping to improve the health of all Kansans, and

WHEREAS, Their efforts on our behalf have proven to be an invaluable aid to the mission and objectives of the Kansas Medical Society, therefore be it

Resolved, That the Kansas Medical Society through this House of Delegates extend its best wishes, thanks for a job continuing to be done and a most heartfelt Happy Birthday to the Kansas Medical Society Alliance, and be it further

Resolved, That we look forward to more fruitful years ahead.

RESOLUTION 95-34

Commendation Honoring the Johnson County Medical Society and Johnson County Medical Alliance

WHEREAS, The Johnson County Medical Society and the Johnson County Medical Alliance have provided an excellent ambiance for another successful KMS House of Delegates meeting, and

WHEREAS, The accommodations have seen to the comfort of the delegates and their spouses, and

WHEREAS, The scientific program and speakers have been informative and stimulating, and

WHEREAS, They have provided interesting diversions for our leisure time — and you can “bet” on that, therefore be it

Resolved, That the KMS House of Delegates thank, commend and give a big “Harrah” to the Johnson County Medical Society and the Johnson County Medical Alliance for their efforts to make the 136th meeting of the House of Delegates of the KMS a success, and be it further

Resolved, That copies of this resolution be forwarded to the Johnson County Medical Society and the Johnson County Medical Alliance.

Council District Reports

COUNCIL DISTRICT 1

The physician members and spouses of Council District 1 met on October 4, 1994, at the Heartland Inn in Hiawatha. There was good representation from all three medical societies included in the district: Northeast Kansas, Atchison County and Leavenworth. The majority of the discussion covered the Heartland Physicians Health Network (HPHN) and how it might eventually affect health care in northeast Kansas. There was an excellent question-and-answer session conducted by KMS President Dr. Don Brada and KMS Director of Public Affairs Chip Wheelen.

Acting as a board member of Heartland Health, I gave a presentation to the Leavenworth County Medical Society in November 1994. Again, excellent questions were asked, and I felt positive information was presented about HPHN. At the time this report was prepared, 59% of northeast Kansas physicians belonged to Heartland Health.

The final news item involves the key contact program through District 1 of the Kansas Medical Society. Because of timely phone calls made to legislators in our district, we were able to table legislation related to scope of practice conflicts with mid-level practitioners, etc.

John R. Eplee, M.D., *Councilor*

COUNCIL DISTRICT 3

The Johnson County Medical Society has focused on the following projects: annual Legislative Dinner, annual Legislative Breakfast, three physician preceptor programs, Healthy Kids Council and monthly meetings.

The Healthy Kids Council is a coalition of the county hospitals, schools, health department, Johnson County Medical Society, Johnson County Community College and Johnson County Medical Society Alliance. Their mission statement is "striving for solutions to health care challenges of Johnson County youth." The Council is planning a day of continuing education for school nurses, teachers, social workers and counselors on August 3.

The annual Legislative Dinner was held at the Overland Park Marriott. The speaker was Dick Schultz. The Legislative Breakfast was a round-

table forum with the physicians and legislators. This year Olathe Medical Center hosted the breakfast.

During the week of June 27, 1994, a physician preceptor program was held jointly with Wyandotte County Medical Society for the legislators from Johnson and Wyandotte counties. The ninth and tenth programs were held the weeks of October 24 and January 30. The chairmen of the program have been George Bures, M.D., and Tom Williams, M.D.

Teresa Tracy, M.D., and Sam Montello, M.D., were judges for the Greater Kansas City Science Fair. Certificates and prizes were presented to the first-, second- and third-place entries from "The Physicians of Greater Kansas City." Johnson County, Metropolitan Medical Society and the Jackson County Osteopathic Society each provided two judges for the biological division of awards.

KMS President Don Brada, M.D., his wife, Kay, and KMS Alliance President Nancy Craig visited Wyandotte and Johnson Counties in January 1995.

We have resumed meeting the fourth Tuesday at 6:30 p.m. at the Overland Park Doubletree Hotel. The meeting topics continue to focus on socioeconomic issues.

The Office Personnel Luncheon Group continues to meet on the fourth Tuesday for lunch in an area restaurant. Round-table group discussions are held regarding pertinent topics in health care.

Our President is Anne C. (Katie) Rhoads, M.D.

Lawrence D. Riffel, M.D., *Councilor*

COUNCIL DISTRICT 4

This district consists of three independent county medical societies: Bourbon (Herbert Grantham, President); Crawford-Cherokee (Mark Carlson, President); and Labette (James Welch, President). All three societies have had regular programs with continuing medical education offerings. The Crawford-Cherokee society also oversees the county ambulance service. The Labette County society has provided nursing scholarships at Labette Community College. The council was fortunate to have KMS President Donald

Brada and KMSA President Nancy Craig visit the council meeting on September 13, 1994.

Several physicians in Council District 4 have been active in the Kansas Medical Society. Stephen Miller, of Parsons, has been an AMA Delegate, council member, and member of the Executive Committee, Continuing Medical Education Committee, Impairment and Advocacy Committee, and Professional Liability Committee. Daniel Pauls, of Parsons, has been a council member, chair of the Geriatric Committee, a member of the Legislative Committee and representative to the Statewide Trauma/EMS Planning Group.

Daniel N. Pauls, M.D., *Councilor*

COUNCIL DISTRICT 6

This will be my last annual councilor's report for the KMS Council, as I am completing my second three-year term at this meeting. I have enjoyed my involvement with the council and will miss serving in that capacity.

Our annual meeting was held in the garden at Historic Ward Meade Park in Topeka, and we were honored to have the KMS President as our guest of honor. In 1992, SCMS entered into a project in conjunction with Ward Meade and the Shawnee County Dental Association to create a turn-of-the-century drug store with working soda fountain and pharmacy, and including a physician's and a dentist's office as museum exhibits. We pledged, as "pace-setters" in this project, to raise \$80,000. Alliance member Joanne Harrison has served as fundraising chair for the project and to date has raised \$60,000 in contributions from our members. The building has become a reality, and later this summer we will begin the process of creating the museum exhibit.

Last summer we embarked on a project to better understand how we could make Shawnee County Medical Society more relevant to our members. We met with our total membership in small groups, throughout July, August and September, and asked them for their criticism and praise. This was a good process that allowed us to implement several new programs for our members and discontinue some that weren't working.

In September, the Race Against Breast Cancer Coalition, a program for low- or no-cost mammography screening for women in Shawnee County, incorporated and SCMS became a member of the board of directors. In its two years of operation, the program has provided 310 free mammograms and two mastectomies to its cli-

ents. The program is beginning an expansion phase, and plans are underway to move it into the SCMS headquarters this July. We are proud to have played a part in the creation of this valuable service to our community. The program is funded in part by the Junior League of Topeka and by the 5K Race Against Breast Cancer run/walk in October. Last year SCMSA member Debbie Geist was race chair and raised over \$8,000 for the program.

SCMS also continues to be involved in planning activities for Breast Cancer Awareness Month in October. We once again were co-sponsors of the "Women's Power Breakfast to Fight Breast Cancer," in addition to other educational and support activities. The breakfast was attended by over 250 women.

During the past year, we focused our community services on a variety of issues. Child sexual abuse took the forefront when in April we co-sponsored, with St. Francis and Stormont-Vail hospitals, "Break the Silence" — a weekend of education around the issues of child sexual abuse. The centerpiece of the weekend was a display of "Tears of the Children," a traveling exhibition of artwork addressing the issue. More than 1,000 persons attended the exhibit.

We have continued our policy of working with other community agencies to provide a wide variety of health promotional activities. We worked with Stormont-Vail to provide skin cancer screenings and did a healthy eating workshop in August. In July we co-sponsored, with Washburn University, the National Youth Sports Program, providing summer activities for over 300 underprivileged youth. In August we gave free physicals in conjunction with the Community Action Center's Back-to-School Fair. We have continued to serve on the Immunization Task Force and assist with educational activities pertaining to fetal alcohol syndrome. In October we were a co-sponsor of the Governor's Conference for the Prevention of Child Abuse and Neglect. This was a very positive experience for us, and we will be involved in the 1995 conference as well.

Upcoming events include a project to address the medical needs of the homeless and creation of an AIDS walk as an annual fundraiser for the Topeka AIDS Project.

Our mini-internship program has proven to be a highly successful tool which allows community leaders a two-day, behind-the-scenes look at the practice of medicine. We offer this program twice a year, spring and fall, and have expanded the

attendance to include high school students interested in becoming physicians. The next session begins at the end of May.

The Legislative Committee continued to work diligently to inform our members of pertinent issues. They developed a rapid-response "calling tree" comprising the entire membership, in order to become mobilized quickly to respond to a political issue. We hosted our annual Candidates' Forum in October and gave our members an opportunity to talk directly to legislative candidates.

Though our Women's Section was formed specifically for activities surrounding Women in Medicine Month in September, it has remained active throughout the year. In September they hosted a workshop for women on "Shame and Body Image," which was well attended. The section has also been supportive of activities surrounding "Take Your Daughter to Work" events. As a means of informal networking, they started a monthly luncheon for all women physicians in the county. These are well received. In 1995 the section is addressing parenting issues. They will host a healthy parenting workshop in September and have entered into negotiations to bring T. Berry Brazelton, M.D., to Topeka in 1996 for a weekend workshop on this issue.

Our Seniors Section has continued its work of supporting our retired physicians. They make regular calls on homebound members and meet twice monthly at the SCMS headquarters for the Senior Doctors' Lounge. The senior physicians have also begun working with USD 501 as adjunct teachers for elementary and middle school science classes. This program has been very successful. Last year the senior physicians began the ongoing History of Medicine Lecture Series, which is presented to the community twice yearly. The first lecture, "A Medical History of Topeka," was presented by Robert Cotton, M.D. Since then we have had "A History of Schizophrenia," presented by Dean Collins, M.D., and "A Celebration of the 100th Anniversary of Roentgen's Discovery of the X-Ray," given by Millard Spencer, M.D. These lectures have been well attended by the community.

SCMS has been working diligently on means to create "non-dues income" to cover expenses without raising dues. Some of the most successful means have been workshops for members and office staff dealing with such issues as stress. We also offered to our younger members an "Investments for Beginners" workshop that was quite successful.

Our Residents Section became active this year with the first class of residents entering the Family Medicine Residency Program. Including the psychiatry residents at Menninger, we now have over 60 residents in our community. In an effort to get them involved in organized medicine, the society waived its resident dues and pays their KMS dues. The residents have engaged in various community service and social activities throughout the year.

Thanks to our ever-growing medical community, KaMMCO insurance and the growing resident population, our membership continues to increase. Our records now indicate a membership of 425. Since my last report, we have lost several long-time members of the society: Floyd Beelman, Harry Bowen, Rodger Kirkegaard, Jack Ross, William Tarnower and Nat Uhr.

In all, this has been an exciting time for SCMS, and we face the future head-on. I have enjoyed my two terms as Councilor and will continue to be active in the society.

Robert D. Durst, M.D.

COUNCIL DISTRICT 8

Activities this past year have been highlighted by the visit in September 1994 by KMS President Donald Brada, M.D., from Wichita. Dr. Brada outlined his agenda, explained his objectives for the year and discussed several aspects of the legislative program. A highlight of the meeting was a visit from Mrs. Nancy Craig, KMSA President. She outlined her program for the coming year and the appropriateness of developing new programs. One of the most pressing issues is membership and participation.

There has been little dialogue with the Butler-Greenwood Society, but they were all invited to the Annual Meeting of District 8.

The Cowley County Medical Society holds monthly meetings and has a scientific program sometimes sponsored by the Wichita Campus of the KU Medical School. Other programs have been sponsored by pharmaceutical companies.

Our membership is still not back up to the level prior to the unified membership resolution. We are striving to enroll every physician in Cowley County, but so far have not been successful. The rescinding of the unified membership requirement has been of some help. We still have several members who are also members of the AMA. There is slight attrition in the number of physicians in the district. Arkansas City has been working diligently to recruit. We do have some consul-

tants from Wichita and Ponca City, Oklahoma, which helps a great deal.

The Snyder Clinic in Winfield has added some new physicians this year, and the hospital is anticipating the arrival of a full-time psychiatrist in June. She will be welcome!

At the time this report was prepared, the extent of members' participation in the Heartland Physicians Health Network was not known, since credentialing was not complete.

Newton C. Smith, M.D., *Councilor*

COUNCIL DISTRICT 11

The activities of the Medical Society of Sedgwick County continue to increase, in terms of both numbers and complexity. The MSSC's membership at the end of 1994 totaled 968, of whom 785 are actively practicing.

During the past year, the society's major endeavor, in cooperation with the four Wichita hospitals, has been the development of a cooperative Medicaid managed care program incorporated under the name of Community Care of Kansas (CCK). Throughout this program, the owner entities, which have been expanded to include some rural hospitals, physicians and other medical providers with whom the CCK will subcontract, will be at financial risk for providing the required medical benefits to approximately 40,000 AFDC and AFDC-related Medicaid patients residing in Sedgwick, Bourbon, Finney and Montgomery counties. This proposal has been endorsed by SRS and was recently submitted to HCFA for approval and granting of the necessary 1115 waiver. In accordance with Kansas legislative action, implementation is slated for January 1, 1996.

With the expansion of managed care programs, and in an effort to reduce the redundancy of physicians' completing numerous membership applications and the related duplication of efforts in verifying physician and non-physician training and practice information, efforts are in process to develop a cooperative information verification program which could be used by all Kansas managed care programs. A similar program developed in 1992, involving all of the Sedgwick County hospitals, has been successful.

In accordance with action of the Kansas Legislature, medical guidelines and protocols for all Type II ambulances operating in the county have been finalized and distributed.

The MSSC's other related programs include the WPPA, Medical Review Foundation, Em-

ployee Assistance Program, Hospital Physician Information Verification Program, Paging, Medical Careers Loan Fund, Medical Student Emergency Loan Fund, Medical Service Bureau and Pharmacy Hotline. All continue to operate successfully.

James A. Loeffler, M.D., *Councilor*

COUNCIL DISTRICT 13

Mrs. Nancy Craig, President of KMSA, and Dr. Don Brada, KMS President, addressed the Central Kansas Medical Society (CKMS) membership at our fall meeting October 27, 1994. Current concerns about the Heartland Physicians Health Network offering and other state and national events were discussed.

The medical community of the CKMS area continues to grow. Twenty-two more new physicians have entered the community in the last year. Physicians were recruited in the disciplines of neurology, oncology, family practice, psychiatry, and pediatrics.

CKMS continues its long-term commitment to support Fort Hays State University by funding support for pre-med student scholarships.

During the fall meeting, held on October 27, 1994, new officers for 1995 were elected. They are Dr. Ross Stadalman, President; Dr. Donald Tillman, Vice President; and Dr. John Pokorny, Secretary-Treasurer. District Representatives Howard Wilcox and Greg Woods were selected to attend the KMS Annual Meeting in May 1995.

Ward M. Newcomb, M.D., *Councilor*

COUNCIL DISTRICT 14

The Barton-Pawnee County Medical Society held its annual meeting on Thursday, June 23, 1994, at the Petroleum Club in Great Bend. During that meeting, Richard C. Preston, M.D., was elected President, and I was elected Councilor. Donald Brada, M.D., newly installed as KMS President, addressed the meeting, along with other dignitaries and KMS staff. Most of the local legislators were also in attendance.

Jay Schukman, M.D., departed from his family practice duties last summer to become Medical Director of Heartland Health. Our society is glad to share Jay's expertise with the rest of the state. Jay is missed, and his replacement, Richard Dexter, D.O., has quickly become very busy assuming Jay's practice.

Last fall Dr. Marta Edmonds' spouse, John,

was elected Representative for the 113th District. This is another friendly face for Kansas medicine.

Our area, which includes Barton, Pawnee and Stafford counties, is still somewhat underserved in primary care. But we are hopeful that some new recruits arriving this summer will bring some relief.

Perry N. Schuetz, M.D., *Councilor*

COUNCIL DISTRICT 15

The southwest corner of Kansas has had some changes over the past year. These are exemplified in one respect by Liberal, which has been actively recruiting and relocating Canadian physicians into the community. This has become more difficult recently because these immigrants are compelled to take the U.S. MLE, which is given in three parts over a long period of time throughout the year. Despite the inconvenience, Liberal has still successfully recruited a few.

What is most notable is that recruiters in Liberal have located specialists from urban areas on the east coast who have been displaced due to managed care organizations garnering control of the market. This is quite a significant trend. We are seeing an influx of Canadians into Liberal due to discontent with the government-run health care delivery system in Canada, and an influx of some American specialists from urban areas also searching for opportunities without central management by managed care organizations.

Dodge City, the other dominant city in the district, has seen Columbia HCA acquire its only hospital, as well as the physician-owned Surgi-Center in the town. A few specialists have migrated into the dominant clinic in Dodge City, as well. Both of these cities are probably showing some growth. The smaller towns in the southwest, including Meade, Minneola, Ashland, Coldwater, Kinsley and Bucklin, which did have medical clinics or small hospitals, are showing static or declining populations in their hospital census. Coldwater did attract a Canadian physician who stayed for only a few months. Ashland has lost its own attending physician and is served by an itinerant internist from Meade. This internist is a Canadian-trained physician who completed a residency in New York City and has a two-year contract.

In summary, the stronger and larger communities probably have shown some growth, but there is wider-spread atrophy in the smaller towns in southwest Kansas to some degree. We are all an-

ticipating with some apprehension the upcoming Medicare cuts.

Seeley T. Feldmeyer, M.D., *Councilor*

COUNCIL DISTRICT 17

The Southwest Kansas Medical Society met in Garden City on April 19, 1994, where Dr. Tom Mathews was elected President. We met with the Honorable Steve Morris, the local state district senator, who gave a review of issues which the legislature had addressed regarding health and reform. The thrust of his talk was that, although there are problems with excessive cost, these could be remedied short of a complete system overhaul. The "403 Commission," chaired by Dr. Bill Roy, was discussed, along with the movement in the legislature to encourage primary care at the University of Kansas School of Medicine.

Our meeting on September 27, 1994, was attended by KMS President Dr. Don Brada, who spoke on several fronts of action and interests which the Society maintains including, at the national level, the Patient Protection Act, Health Care Antitrust Improvement Act, liability reform, and the House Bipartisan Health Care Reform Bill, which have been supported by the AMA. On the state level, he discussed the Health Care Reform Oversight Committee, formed to observe Washington's activities and to provide appropriate legislation for Kansas. We also discussed the Blue Highways Committee, utilized by the legislature to obtain feedback about rural health needs, and finally the collateral source rule, which was vetoed by the governor. Dr. Brada also outlined the developing Heartland Physicians Health Network in order to inform physicians considering contributing to its funding.

The Southwest Kansas Medical Society met again November 16, 1994. Initial discussion was over managed care, and then Dr. Howard Reynolds, retired professor of botany from Fort Hays State University, gave a talk on "Ethnobotany in the Rain Forest."

The local medical society met again on March 30, 1995. At that time, it was announced that the Southwest Kansas Medical Society Directory was at the printer and would soon be available to the members. A talk was given by Betty Waddington, CMPE, consultant with the Medical Group Management Association, who presented a program dealing with managed care organizations during the coming decade.

Bruce D. Melin, M.D., *Councilor*

CME OPPORTUNITIES

Ethical Decision-Making Along the Continuum of Care. Sept. 22, 1995; Airport Hilton, Wichita. Call KMS 800-332-0156 or 913-235-2382.

Comprehensive Gynecology. Sept. 29-Oct. 2, 1995; New York. Call Center for Bio-Medical Communication, 201-385-8080.

Disease and Deception in the White House (historical program on presidential physicians and their patients), presented by Robert P. Hudson, M.D. Oct. 7, 1995; Kansas City. Call 913-588-4488.

Advances in Sonography. Oct. 13-15, 1995; Chicago. Call Soc. of Radiologists in Ultrasound, 215-574-3183.

ASIM Annual Meeting. Oct. 18-22, 1995; Washington, DC. Call 202-835-2746.

North American Spine Society Conference. Oct. 18-21, 1995; Washington, DC. Call 708-698-1630.

Heartland Rural Health Forum. Oct. 19-22, 1995; Kansas City, MO. Call NRHA, 816-756-3140.

Managed Care Conference. Oct. 22-25, Nashville. Call AMCRA, 202-728-0506.

State-of-the-Art Conference. Oct. 23-27, 1995; Seattle. Call Am. Coll. Occupational & Environmental Medicine, 708-228-6850.

Infectious Disease Review Course. Nov. 3-5, 1995; Bethesda, MD. Call Center for Bio-Medical Communication, 201-385-8080.

Preventing Atherosclerosis. Nov. 4, 1995; Kansas City, MO. Call KUMC, 913-588-4488.

KaMMCO LOSS PREVENTION SEMINARS

Call Diana Mayer at KaMMCO, 800-332-2259, or 913-232-2224, for information about the following seminars.

- Topeka, September 18.
- Fort Scott, October 2.
- Hays, October 9.
- Hutchinson, October 16.
- Wichita, October 18.
- Topeka, October 23.
- Shawnee Mission, October 26.

COUNCIL DISTRICT 18

Council District 18 met in February with Dr. Brada and Alliance President Nancy Craig at the Learned Club in Lawrence, with representation from Anderson, Franklin and Douglas counties. The response to Heartland Health by our physicians has been very positive and this, in turn, has helped increase membership in the county as well as the state society. Like Franklin County, Douglas County physicians have been working with the hospital to develop a local provider network. The Community Health Plan has now been initiated in Douglas County.

A great deal of discussion has been generated by the migration of Columbia Health Corporation into the Lawrence community, with its possible impact on the viability of the community hospital. Columbia's influence has even affected Anderson County. We are growing more and more aware of the movement of big business into the medical marketplace, with the resultant changes in the practice of medicine as we know it today.

Phillip A. Godwin, M.D., *Councilor*

COUNCIL DISTRICT 19

Our past year has been a very interesting and challenging one. We have been dealing with the establishment of PHOs in at least two of the area hospitals. We are trying to keep abreast of managed care and have monthly meetings regarding pertinent CME topics.

We also very much enjoyed our annual visit from the President of KMS.

Charles L. Empson, M.D., *Councilor*

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The History of Scurvy and the Poetry of Illness

James Cook and the Conquest of Scurvy, Francis E. Cuppage (Westport, CT: Greenwood Press, 1994), 192 pp., \$55 hardbound.

A black-powder flintlock pistol from the Andes of Ecuador now resides in my home. It was made in London well over two centuries ago, and in his book Dr. Cuppage provides the following insight into how it may have found its way to Quito. In 1740, the British Admiralty, predicting war with Spain, sent a squadron of naval vessels to annoy Spanish missions along the Pacific coast of South America.

The volume describes many other facets of the history of the British Admiralty, the Manila Galeon, naval medicine, and world history as well. The book examines relationships among botany, medicine, and global events, in addition to descriptions of and investigation into the causes of scurvy.

Like Darwin, whose pivotal voyage to the Galápagos Islands took place 63 years later, Cook was one of the famous scientists who began their careers as ships' surgeons. In fact, according to Cuppage, Cook's three voyages paved the way for his successors' naval-scientific forays.

The treatment of scurvy in Tierra del Fuego (a sparsely inhabited land south of the Strait of Magellan) in 1519 is discussed. The defeat of the Spanish Armada in 1588 serves as an example of the role of scurvy in naval and world history. Other examples include the use of lemon juice in the Napoleonic wars, the defeat of the French and Spanish at Trafalgar and the successful blockade of the French at Brest. (One learns in London that Nelson fired his naval guns faster, but Cuppage's account may provide an explanation of how he managed to do so.)

Production of more accurate instruments for navigation and microscopy began in the 16th century, and Dr. Cuppage provides fascinating information about such advances made by Captain Cook and his contemporaries.

In addition to the historical accounts, scientific aspects of scurvy and other vitamin C-related disorders are discussed. For example, the metabolic product of hypervitaminosis C (oxalate) may lead to renal oxalate calculi; in fact, approximately 40%

of oxalate calculi are formed from ascorbic acid. The effect of vitamin C on metal absorption and the biochemistry of L-ascorbic acid/dehydroascorbic acid are included. The brief discussion of nephrocalcinosis suggests a reason why a nephrologist may have become interested in the topic of this monograph.

One does not have to be a physician to relish the book, but to enjoy it properly a medical background helps. Maps would have been a welcome enhancement. One wishes the author had shared his wide knowledge of many topics with just a few more explanations; e.g., the relationship between Kendall's chronometer and measurement of longitude.

This slim, portable text intertwines seafaring, naval battles, mutinies, wars, expeditions and exploration. Courage, botany, chemistry, the Royal Society and clinical medicine all are admixed wonderfully. The book touches on scurvy in sieges, marches, famines — and even the California gold rush of 1849. It is a stirring book which deserves a wide circulation. I found it a joy to read.

David S. Jacobs, M.D.

Articulations: The Body and Illness in Poetry, edited by Jon Mukand (Iowa City: University of Iowa Press, 1994), 426 pp., \$19.95 paperback.

Readers who enjoy *JAMA's* "Poetry and Medicine" column and seek other sources of poems about illness will want to pick up a copy of this collection. It includes works by some of America's best contemporary poets, including Howard Nemerov, Joyce Carol Oates, Karl Shapiro, Diane Ackerman, Sharon Olds, and many others. The editor, Jon Mukand, is a poet and physician.

The full gamut of life, illness and death is covered, from obstetrics to geriatrics, birth defects to strokes, and everything in between. The points of view are equally varied, including medical personnel, patients, caregivers, family and friends, men and women. General topics include the body, the hospital, mental illness, disability and social issues.

Each subject area has many facets. For example, the section entitled "Disability: Their Lockstep Tight as Lilac Buds" contains poems by and

about amputees and crippled children, postsurgical disability, a child with birth defects, neurological problems due to cancers, stroke patients, global aphasia, spinal cord injury, osteoporosis, blindness, deafness and sign language. There are some unforgettable people in this collection: an exuberant Mr. Wallace, who receives a chin-operated, motorized wheelchair after 20 years of paralysis and finally feels free; and a boy with severe neurological deficits including nearly unintelligible speech who is writing a novel — his second — set in space.

Many eloquent images will please the reader, such as this one on the nature of sign language: “My voice, plucked from the air, clasped in the interpreter’s hands . . . The word, unutterably, made flesh.”

Most poems in the “Disability” section share the quality of determined optimism, and some are simply delightful, such as this one by H. N. Beckerman:

To:
The Access Committee,
Attention:
Handicapped Romeo.
There is now a suitable ramp
installed at my balcony.
Impatiently,
Miss Juliet

and “The Old Hooper,” by Lillian Morrison:

If my legs cannot move
I will wriggle my toes
Till they learn
To do intricate dances.

Not all of the subjects are physical illnesses, and the section entitled “Mental Illness: The Shadow of the Obsessive Idea” contains some poignant works. “To Make a Dragon Move: From the Diary of an Anorexic” explores the self-revulsion and striving for control that characterize this affliction. Several other poems probe the depths of schizophrenia, paranoia, and life in mental hospitals. A brief work of Langston Hughes elucidates “Suicide’s Note”:

The calm,
Cool face of the river
Asked me for a kiss.

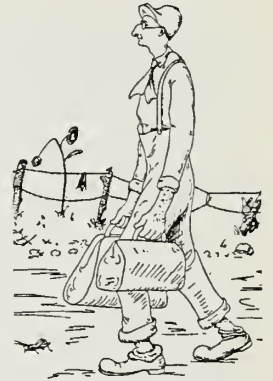
Through the poems, physician readers may gain insight into patients’ — and their own — perceptions of illness. A copy of this book on the office bookshelf might be just the thing for times when five minutes of quiet reflection make it possible to get through a particularly long day.

Susan Ward

The “New” Doctor

ARTHUR E. HERTZLER, M.D.

The young doctor naturally took things more seriously than the seasoned old doctor, both because of the desire to establish himself in the community and because of the belief that his services always were of great importance. That is to say, his ignorance approached that of the patient. Then, too, the old doctor knew the people, both physically and financially, and if the patient’s complaints were negative, he had urgent business elsewhere. One of my first calls will explain why.



A boy came galloping to my house, the horse covered with foam, knees shaking and obviously at the point of dropping in his tracks. The boy, eyes bulging, shouted: “Come quick, Doc. Mother’s terribly sick.” I hastily hitched my horse and made the seven miles in considerably less than an hour — some driving! I rushed into the house only to find an assortment of women solemnly sitting about the stove doing nothing — except talking, of course.

I asked, “Who’s sick?” The lady of the house calmly answered, “Well Doc, I reckon it’s me. I ain’t really sick, but I’ve been porely since Christmas and so Pa thought I’d better see a doctor. I didn’t feel like riding to town so we sent for you because you are the new doctor.” The significance of that last remark escaped me at the time, but I soon learned that they never paid any doctor anything and that the established doctors turned a deaf ear to them. That is the way it is with deadheads. They make their call sound urgent in order to break down whatever sales resistance the doctor may have. Another thing this case taught me was that deadheads will call the doctor for minor ailments, whereas in similar circumstances those who expect to pay will go to his office. In this case the patient’s family of ten or more children seemed to be the trouble. Any experienced doctor can tell from these remarks what was wrong with her.

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Policy for Utilizing Do-Not-Hospitalize Orders in Kansas

Patients benefit when they and all the providers of their care have a clear mutual understanding about standards of care. There was a perceived need in Kansas for a better understanding among patients, physicians and nursing homes about what constitutes appropriate hospital admissions, and what circumstances might make transfer to a hospital inappropriate. With this in mind, Andrew Barclay, M.D., of the Department of Family and Community Medicine, University of Kansas School of Medicine, Wichita; the Medical Society of Sedgwick County; and Kansas Health Ethics developed the following "Policy for Utilizing the Do-Not-Hospitalize Order."¹

Part One: Philosophy of Care

Medical goals. The primary goals of the physician are: to promote healing, to combat disease, to prevent untimely death and to relieve suffering. When possible, the physician should treat to cure and bring about full recovery. However, when the patient's disease process or injury exceeds medicine's ability to bring about recovery, the physician should offer palliation for the patient's discomfort and should help the patient cope with illness, disability and dying. In pursuing these medical goals, the physician must:

a) Uphold the ethical principles of medicine, especially with respect to patient dignity and autonomy;

b) Observe professional standards of practice.

Patient Autonomy. The principle of autonomy secures for the patient the right to refuse or consent to treatment. The physician must inform the patient about his or her medical condition, prognosis, and treatment options, together with their likely risks and benefits. The physician must respect the patient's right to refuse offers of treatment as well as to accept them.

Standards of Care. The patient should respect the physician's responsibility to determine the appropriate treatments from which to choose, and to offer an optimum care plan that responds to changes in the patient's condition. The care offered to the patient should reflect the physician's

best medical judgment and conform to professional standards. Neither the patient nor the patient's agent may compel the physician to act contrary to his or her best medical judgment.²

It should be recognized that the ability to provide high-quality care in a supportive, familiar environment may make nursing home or home-care options such as hospice the preferred treatment setting for some patients.

Futility. When any intervention, including the decision to hospitalize, is medically futile, then there is no obligation to offer it. An intervention is futile if it:

a) with reasonable certainty will not bring about the patient's recovery from illness, disease or disability;

b) imposes burdens grossly disproportionate to any foreseeable patient benefit;

c) will not play an effective role in mitigating the patient's discomfort; *and*

d) serves only to postpone artificially the moment of death by sustaining, supplanting or restoring a vital function.

Part Two: Guidelines

Patient Autonomy

1. A competent and informed patient may refuse medical treatment, including hospitalization. The patient may express his decision to refuse hospitalization orally or by written advance directives, including the "Living Will," the Durable Power of Attorney for Health Care Decisions, or a treatment directive. When so directed, the physician shall enter a Do-Not-Hospitalize Order into the patient's record.³

2. A competent patient may orally revoke his/her Do-Not-Hospitalize directive at any time.

3. A legal agent for an incompetent patient may refuse treatment on behalf of the patient. (A legal agent is one who has authority through a Durable Power of Attorney for Health Care Decisions.) When so directed, the physician shall enter a Do-Not-Hospitalize order into the patient's record.

4. If the patient is not competent to make or communicate a decision, and there are no written directives, the physician may consult with family members or others who may have evidence of the patient's wishes. In such a circumstance, it

Prepared by Kansas Health Ethics, 250 N. Rock Rd., Suite 370, Wichita, Kansas 67206.

remains the physician's responsibility to offer care in accordance with professional standards of practice.

Medical Futility

5. When the attending physician has determined that hospitalization is medically futile as defined above, this determination should be documented in the patient's record. The physician should notify the patient or the patient's representative when such a determination has been made. After consultation with the patient or the patient's representative, the physician may enter a do-not-hospitalize order into the patient's record.

6. The physician should communicate with nursing staff and other members of the health care team in making a determination about medical futility and in developing a comfort care plan for helping the patient cope with discomfort, illness, disability and dying.

DNH Orders, Protocols

7. The rationale for DNH orders and any relevant discussions should be documented in the patient's chart.

8. DNH orders and other treatment-limiting orders should be written by the physician according to protocol using the do-not-hospitalize order (see figure). Such orders should be reviewed periodically by the physician and the patient or the patient's agent.

9. Any facility which adopts a policy regarding DNH orders should implement a program for educating physicians, patients, staff and the public about the order. The education program should begin before the implementation of the policy and should be a continuing process.

Part Three: Background Information

Changes in the structure and organization of health care and the aging of the population in the last decade have combined to increase the number of persons who reside in nursing homes, extended care facilities and supervised residential settings. In addition, more people are electing hospice care in their own homes or care settings as an alternative to hospitalization during the last days or weeks of their life. Some merely prefer that they not be hospitalized for terminal illness care, preferring to remain in their present environment. Other developments have changed in several ways the context in which treatment limitation decisions, such as the decision not to hospitalize, are made:

1. New technology has increased the number and types of treatment-limiting decisions.

2. There is an increasing emphasis on the patient as the primary decision maker.

3. There is increased use of teams of physicians, nurses and specialists in the care of critically ill patients.

4. Documentation in the medical record is critical in communication and accountability.

Authority. The state of Kansas recognizes the right of individuals or their agents to direct their personal health care in the "living will" declaration; the durable power of attorney for health care decisions; and do-not-resuscitate directives.

The American Medical Association and the Kansas Medical Society have adopted resolutions which:

1. acknowledge do-not-hospitalize orders in the nursing home situation, when based on the resident's (or his/her family's) informed consent, providing an appropriate means of promoting patient autonomy and carrying out the express wishes of the resident; and

2. encourage physicians to familiarize themselves with do-not-hospitalize orders, utilize them when appropriate, and support all efforts to educate the public about such orders.^{4,5}

The Medical Society of Sedgwick County has endorsed in principle these policies for DNH orders.⁶

Part Four: Summary

Kansas Health Ethics recommends that non-acute-care facilities consider adoption of a policy on do-not-hospitalize orders. We further recommend that any such policy should include written provisions for guarding patient autonomy, standards of care, informed consent, education and periodic review. We invite your comments.

REFERENCES

1. This policy utilizes language from "Policy for Withholding or Withdrawing Futile Treatments" of the Charlotte-Mecklenburg Hospital Authority, Charlotte, NC.

2. A physician is not ethically obligated to make a specific diagnostic or therapeutic procedure available to a patient, even on specific request, if the use of such a procedure would be futile. (Council on Ethical and Judicial Affairs, Guidelines for the appropriate use of do-not-resuscitate orders. *JAMA* 1991;265:1868-71.)

3. Although there is no statute relating to refusal of hospitalization, a specific instruction by a patient may be written in the document.

4. Kansas Medical Society Resolution 94-19, "Do Not Hospitalize Orders."

5. American Medical Association Resolution 215, I-92, "Do Not Hospitalize Orders."

6. Medical Society of Sedgwick County, April 26, 1995. See also: Memo, "Do Not Hospitalize," Dr. Andrew Barclay.

Angioplasty for Myocardial Infarction

DONALD L. VINE, M.D., * *Wichita*

The TIMI II trial, published in 1989, helped to establish early thrombolysis as the treatment of choice for acute myocardial infarction, because subsequent percutaneous transluminal coronary angioplasty (PTCA) offered no additional benefit.

Since then, it has become clear that there are many ways to look at balloon angioplasty following acute myocardial infarction. Angioplasty can be performed either early or late following thrombolysis, performed only for patients with failed thrombolysis, or performed instead of thrombolysis. A recent meta-analysis by Michels and Yusuf¹ identified 23 trials comprising 8,496 patients that compared at least one of these strategies with an appropriate control group.

PTCA after Thrombolysis

The largest number of comparisons have been performed to evaluate the benefit of angioplasty as adjunctive treatment to early thrombolysis. Five of these trials compared immediate versus no angioplasty, six early versus no angioplasty, three delayed versus no angioplasty, and three early versus delayed angioplasty. At six weeks, there was an absolute mortality disadvantage to the invasive approach, although the statistical difference was nil. Comparing infarct-free survival after one year, there was still no statistically significant advantage demonstrated for routine post-thrombolytic angioplasty.

Thus, after 17 randomized trials, comprising 7,759 patients, that examine post-thrombolytic angioplasty performed immediately, early or prior to discharge, there has been no demonstrated benefit for an elective aggressive strategy.

Crossover rates from conservative assignment to angioplasty, which ranged to over 40% in some trials, complicate interpretation of these findings. It should also be emphasized that most protocols encouraged angioplasty among patients who re-

sponded suboptimally to initial conservative management.

PTCA Instead of Thrombolysis

Contrasting results have been reported for 1,145 patients from seven trials randomized to receive either thrombolysis or angioplasty instead of thrombolysis. After six weeks, the mortality of the conservatively treated patients (6.4%) was nearly twice that of the aggressively managed (3.7%). Similarly, infarct-free survival (93.9%) versus 89% favored an initially invasive strategy. After one year, the differences were smaller (90.8% versus 89.9%).

PTCA for Failed Thrombolysis

Fewer than 200 patients have been randomized to undergo "rescue" angioplasty versus continued conservative management for failed thrombolysis, but the early differences in outcome are even more striking. After six weeks' follow-up, mortality of conservatively managed patients (12.9%) was more than twice that of the invasively managed (5.4%). At the end of the first year, the infarct-free survival continued to favor aggressive management (81.2% versus 76.7%).

Comments

Early thrombolysis remains an effective treatment for patients with acute myocardial infarction. If patients requiring subsequent angioplasty for clinical indications are excluded, the performance of routine balloon angioplasty adds little demonstrated benefit in terms of recurrent myocardial infarction or death during the first year.

For patients who can undergo balloon angioplasty within a few hours following onset of symptoms, angioplasty without thrombolysis offers an acceptable alternative to thrombolytic treatment. Angioplasty also remains an attractive and effective alternative for patients with contraindications to thrombolysis.

REFERENCE

1. Michels KB, and Yusuf S. Does PTCA in acute myocardial infarction affect mortality and reinfarction rates? *Circulation* 1995;91:476.

*Associate Professor, Department of Medicine, University of Kansas School of Medicine-Wichita.

Address correspondence to Dr. Vine, Department of Medicine, UKSM-W, 1010 N. Kansas, Wichita, KS 67214.

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- Feature Article: Kansas Women in Medicine
- Teenage Pregnancies in Kansas, 1980-1993
- Geriatric Hearing Impairment and Functional Independence



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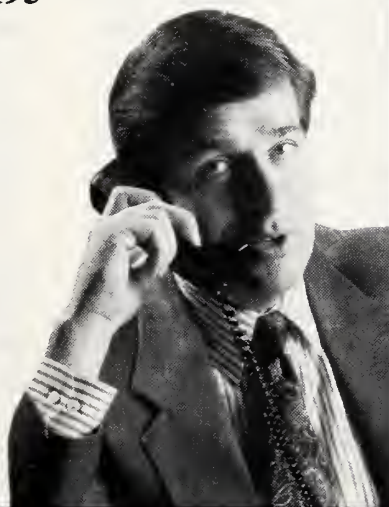
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The Little Engine That Thought It Could — and Did

D. CRAMER REED, M.D., *Wichita*

Since this issue commemorates the 20th anniversary of the Wichita Campus of the University of Kansas School of Medicine, it seemed proper to ask the first dean to write the editorial. D. Cramer Reed, M.D., was the only individual who could have successfully brought about the establishment of the Wichita Campus, and both campuses and the medical community owe him many thanks. While we could consume more space outlining his numerous talents and accomplishments, we know he would prefer that we make the introduction brief. Thank you, Cramer, for agreeing to be our guest editorialist. W.E.M.

The “Wichita Branch” started out much like the little engine that thought it could. And there truly were steep hills ahead of it. The initial climb turned out to be a continuing series of meetings with Sedgwick County legislators, Wichita physicians, real estate agents (to help find affordable student housing), hospital administrators, the Wichita Area Chamber of Commerce, Wichita State University administrators, and even a critical newspaper editor from an eastern county in an effort to obtain a consensus for the endeavor and to finalize arrangements for the 15 students from the Kansas City Medical Center who were to comprise the charter class.

During this period, the continuing support of individuals such as A. B. (Jack) Davis at Wesley, John Holmgren and the late Joe Heeb at St. Joseph and Sister Agnes Marie at St. Francis encouraged those closest to the developing school to have “one more meeting” before deciding it just wasn’t possible. Later, after the students arrived, these same institutions offered to provide noon meals for them, along with classrooms, lockers and student meeting rooms.

Obviously, the clinical branch, now retitled the Wichita Campus, did not evolve in isolation from the Kansas City medical center. Several KUMC administrators including E. B. Brown, Registrar; Walt Gehlbach, Director of Admissions; Pat Head, of the Medical Center Alumni Office; and Executive Vice Chancellors Bob Kugel and Bill Rieke were very supportive and helpful, as were faculty members such as Kermit Krantz, Jack Walker and Marvin Dunn, to name only a few. But for several of the basic science and some clinical faculty members, the new off-campus clinical program caused much concern, if not outright angst.

Such reactions were not without basis, because the Wichita clinical faculty and administrators were essentially “home grown” and consisted of two general groups. The first was made up of successful practitioners, most of whom had no prior experience in developing or teaching in an undergraduate medical education curriculum. Surgeon George Farha, psychiatrist George Dyck, internists Ernest Crow and Walker Butin, pathologist Bill Reals and radiologist Si Hershorn were prominent in the beginning and made outstanding contributions to the cause. And there were other community physicians who also labored to complete the curriculum. Without these people, the little train could never have made it. With a total operating budget of less than \$200,000 in 1973, it is obvious that for the most part these clinical department heads served pro bono, as did virtually all other physicians early on and even today. Because of the demands of private practice, most of the organizational objectives and curriculum work had to be addressed after office hours and on weekends.

Fortunately, Dan Roberts from the Texas medical education system; Doug Voth, originally from the Medical Center; diabetologist and pediatrician Dick Guthrie from Missouri; and others made significant credibility contributions early on, keeping the engine chugging uphill.

Several Kansas City Campus academic colleagues provided us with topical course outlines and helpful suggestions. They participated vigorously in joint faculty meetings held periodically in Emporia, Kansas City and Wichita.

The second group of Wichita education mavericks (my title for a group of special people) did not consist of the usual mix of administrators, as many were Ph.D. types. For example, the Direc-

tor of Student Services was recruited from the Wichita State University English Department. The Director of Research, a former professor of electrical engineering, was also from Wichita State. The Director of "Rural Outreach" had his terminal degree in European history, and the Director of Business Affairs and Personnel was pursuing her M.B.A.

Bill Reals and Joseph Meek, the immediate past Vice Chancellor and current Dean, respectively, have reviewed the archives of the Wichita Campus and have prepared a chronology published in this issue that many will find interesting.

Several of the policies and curriculum components established in the very beginning (such as Introphase) have withstood the test of time and continue to be employed today. The 1995 rural outreach program has, of course, been expanded and refined, yet it encompasses several features promulgated 21 years ago. And Lorene Valentine, the original Director of Business Affairs and Personnel, completed her "tour of duty" in 1992 as the Associate Dean for Administration for the Wichita Campus.

From the very beginning, a substantial effort was made to touch base with family practice physicians and specialists regarding concepts and organizational progress of the Wichita campus with the hope that the "town and gown" syndrome might be avoided. For the most part, I believe such efforts were successful and continue to be so, even with the addition of significant numbers of full-time teaching faculty at the Wichita Campus.

Sometime prior to the assignment of the original class of students to the Wichita Campus, a few adventurous juniors and seniors came to Wichita for electives and clinical clerkships in surgery and ob/gyn. Following those limited exposures, there were additional requests for Wichita electives in other specialty areas. Such expressions of interest were partially responsible for the Legislature and the Board of Regents giving further consideration to establishing a clinical branch in Wichita.

The first students and a few spouses arrived in Wichita on a wintery Saturday in January 1974. They were greeted in the "branch" offices on the fifth floor of Fairmount Hall, a dormitory on the campus of Wichita State University. At that time, they signed in and finalized living arrangements, many of which had been sought out by local student services. Spouses were briefed regarding job opportunities, these also having been researched

A substantial effort was made to touch base with family practice physicians and specialists.

by the Director of Student Services, the wonderful Hazel Fenske, who soon became the "house mother" to every student coming to Wichita until her retirement in 1985.

Our philosophy called for administrators and faculty and even the clinical volunteers to become personally involved in the well-being of the students. My wife felt so strongly about this that she had a series of student-faculty gatherings in our home, which in addition to providing appreciated nourishment, did much to build camaraderie. Early on, when the classes were small, each student and spouse became known personally to department chairs and to my wife and me. Such activities and the "we're all in it together" spirit of the faculty, did much to remove the anxiety of reluctant students lotteried to come to "Cowtown USA."

Initially, a team composed of Wichita faculty and students traveled to the medical center prior to the lottery process to "market" the Wichita experience. It wasn't long, however, before this was no longer necessary, because increasing numbers of students elected to transfer to Wichita for their clinical rotations and electives.

Clinical rotations with rural physicians, often assisted by a physician assistant and/or nurse practitioner, were very well received and successful. Much of the credit is due to the physicians who agreed to accept the student, not only in their practices but also literally into their own homes. However, much credit is also due to the cowboy-booted Ph.D. European history professor who made assignments and rode herd over the students' clinical experiences.

More could be recalled of the early years, and some might even be of interest to the casual reader. Suffice it to say that had we been better informed, more experienced, and perhaps less emotional in our support of medical education in a previously non-academic setting, we would probably never have attempted to form a clinical medical school of the scope and sophistication that best describes the Wichita Campus today. Fortunately, the mavericks blundered on. Now

the community and its numerous physician and non-professional health care volunteers who have made and continue to make significant contributions with little or no pay have been rewarded with one of the best, most stable community-based medical schools in the country.

While it has been successful in helping to increase the number of physicians practicing in non-urban locations, it is my (perhaps biased) opinion that the University of Kansas School of Medicine-Wichita will have an even greater impact on the future health care of Kansans by virtue of the ongoing significant changes in medical education emphasizing the importance of a continuum of primary care education. The principal beneficiaries will be the citizens of Kansas. We believe that in terms relative to the history of community-based medical schools, the Wichita Campus has succeeded far beyond reasonable expectations.

The little engine did make it to the top and now must push on as a true partner with the Medical Center in producing physicians firmly based in the fundamentals of medicine, technically trained, yet skilled in the humanistic application of total health care for citizens of all ages.

COVER STORY

The 20th anniversary of the University of Kansas School of Medicine-Wichita was observed at festivities held on the campus in June. The school's deans appear in the cover photo: Founding Dean D. Cramer Reed, M.D. (1971-78); William J. Reals, M.D. (1980-90); and Joseph C. Meek, M.D. (1991-present). Richard A. Walsh, M.D. (1978-80) is not pictured.

In observance of the anniversary, this issue of the journal features papers from several departments at the Wichita campus.

CORRECTION

The Summer 1995 cover story about the DNA molecule should have included the following information: cover art by Hillary Tranter, copyright *Nature Genetics*, 1993. KANSAS MEDICINE regrets the omission.

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The Kansas Physician's Role in Medical Education

Recently I had a very interesting week, one of reflection about the education of young physicians. As President of KMS, I had the privilege of addressing the entering class at KU School of Medicine. What an exciting time — what an inspiring time — as these students begin their journey into the medical profession. Despite my being the last speaker of the day, these bright young people listened attentively (just prior to being free to go to the activities fair and eat free pizza!) as I welcomed them to the Kansas family of physicians and introduced them to organized medicine. I spoke of the relationship with medical students that we as practicing physicians cherish, and of our desire to participate in their education in ways additional to the learned teachings of the University's professors. They seemed to welcome the invitations. Large numbers immediately joined KMS and the AMA that day — and asked how they can become involved.



As I drove home, I reflected on the role we as Kansas physicians can have in helping these young physicians to develop. It soon became apparent that probably many of us have already touched some of these students' lives. When did the spark ignite that led these students into our profession? (When did you make your commitment to a life of medical service?) For many, it comes from some encounter with a physician — be it a brief meeting or a long relationship with a physician role model. Some of us will not even know we have had such an impact, but isn't it exciting to think we may have been part of the stimulus to begin these careers?

A later stage when we may have influenced these students was during their application and selection for medical school. Many of us have had the unique opportunity to serve on KU's medical school interview panel — a great responsibility. When called upon, each of you has undertaken this task seriously and with a high degree of commitment to doing the absolute best job possible. I think one of the greatest privileges and responsibilities we have as physicians is to help decide who

is asked to enter our profession. The responsibility, the personal reflection that is required, cannot be totally perceived until you have been involved in the process. Who better than a practicing physician to ask, "What does it take to be a really great physician — what intellectual capabilities, what personality traits, what personal skills?" — and a host of other determinants. The first time I interviewed medical students was probably the most meaningful event in my practice life up to that time. I had to truly reflect on what my profession meant to me, how it had evolved as the years passed, and what qualities I or my colleagues possessed that I wanted to see in future colleagues — and what traits were undesirable.

Also last week I met with Assistant Dean for Admissions Sandra McCurdy, Executive Dean Daniel Hollander, M.D., and Associate Dean of Student Affairs Herbert Swick, M.D., to discuss the admissions process. I stressed the feelings I expressed above and was assured that KMS physicians would continue to serve as interviewers as part of the admissions process. I am certain there will be some change from the previous format as its strengths and weaknesses are analyzed, but it is certainly my opinion that the input of practicing physicians across the state must be preserved as integral to the effectiveness of the process.

Other changes will probably come as we interact with medical students. Many Kansas physicians have had the experience of serving the profession and touching students' lives by serving as KU preceptors. As most know, this is a highly respected and popular rotation started decades ago by Chancellor Murphy. Now, as the University prepares for the implementation of the new primary care initiative, students will go out into the state as part of their rotations, in addition to participating in the traditional preceptorship. In this way, Kansas physicians will probably have more opportunities to contribute to the educational process.

As I analyzed the contributions Kansas physicians have made to the education of our students, I was filled with a great sense of pride. You have

(Continued on page 116.)

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The Other Woman in Medicine

When I heard that this issue would contain a feature story on Kansas women in medicine, I wanted to contribute something appropriate. Not to be insensitive to the Alliance's male members, whom we greatly appreciate, but this column is dedicated to the "other woman" in medicine.



Let me clarify. If you are a married male physician, have you ever given any thought to how your occupation affects your wife? After being married to a medical student, resident and physician for nearly 20 years, I feel very qualified to speak for all of us other women.

The other woman in medicine quickly becomes very well versed in medical matters, whether or not she has a medical background. Ask any wife who has been to a dinner party attended by many physicians. She stands by while she hears of Mrs. Jones' gallbladder, Mr. Smith's urinary problems, and the difficult delivery of Baby James — not to mention the pleasure of eating dinner while discussing an unusually messy recent surgery. To be an active participant in this conversation, the other woman must keep up with *ER* and *Chicago Hope*.

The other woman in medicine must keep a current driver's license because she seldom is able to accompany her husband anywhere. It's common to receive a phone call from one's mate, who's "tied up" or "running late" and will "just meet you there." You must also act as chauffeur on any lengthy trip because this is a great time for CME study, journal reading or dictating.

The other woman in medicine learns quickly how to field medical phone calls. The caller may be a patient who informs the other woman of all her ills, expecting her to know the answers (after all, she must have great knowledge since she lives with a physician). It might be someone trying to speak with the doctor on his day off, or a caller with a problem in the middle of the night.

The other woman in medicine must be chief care giver at home. She doctors her own children

because her husband turns to mush around them, and his brain shuts down. She's often a single parent and is great with reasons why Dad can't be there. This is especially true during medical boards and recertification month. The other woman in medicine dreads this time as much as the physician does.

Still, the benefits of being the other woman in medicine far outweigh the negatives. Being a physician spouse gives one an understanding of how important good medical care is to a community. It gives one a sense of pride in knowing one's spouse helps so many people. It gives one an organization to join for support and community service: the Kansas Medical Society Alliance.

Our organization is a constant support group for medical families in need. Whether one has a pending medical malpractice suit, a sick loved one, or some other problem, no one group that the other woman in medicine can belong to understands better the special needs that the medical family sometimes has.

The Kansas Medical Society Alliance continues to work hard for AMA-ERF to help support needy medical students. The county alliances support women's shelters, child abuse awareness and breast cancer awareness projects, health fairs and many other causes in their communities. Alliance members constantly follow legislative issues and relate these to their physician spouses. Each February the Alliance devotes a two-day meeting to legislation so we can keep informed and keep you and the community informed.

If you are a physician who loves an "other woman" in medicine, please support her membership in the Kansas Medical Society Alliance. The benefits to her and the support of other "other" women who understand her unique marriage will be tremendous.

Do I like being the other woman in medicine? You bet I do!

Lisa Barker



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Garfield University and the First Medical School in Wichita

ERNEST W. CROW, M.D.,* *Wichita*

The University of Kansas School of Medicine at Wichita, which opened in 1974, was not Wichita's first medical school. During the 1880s, the Christian Churches of Kansas voted to establish an institution of higher learning in Wichita, and construction began in July 1886.¹ The building was a five-story structure of pressed brick and stone, 234 by 200 feet in size, with a spectacular tower about 200 feet tall. It was designed by the architectural firm of Proudfoot and Bird and built at a cost of \$200,000.² The school was named in honor of the late President James A. Garfield. W. B. Hendryx, pastor of the Central Christian Church in Wichita, was said to be "the leading spirit" in developing the school and was the first president of the Garfield University Board of Trustees.³ According to Hendryx's daughter, her father and Garfield were roommates at Hiram College in Mentor, Ohio.⁴ The university was built on land at the junction of Mentor and Hiram streets, named by W. B. Hendryx for his home town and his college.

Garfield University opened for classes in September 1887, led by Chancellor H. W. Everett, a graduate of Oberlin College. The building was not complete (see figure), so classes were conducted temporarily in a nearby structure.⁵ The school opened with high expectations and presented a diversified curriculum which included law and medicine.

By late in the 19th century, scientific medicine was accepted by increasing numbers of physicians as knowledge of the works of scientists such as Virchow, Koch and Pasteur became more widespread. Laboratory medicine, including the use

of the microscope for examination of tissue, was commonplace in progressive medical communities. Wichita physicians under the leadership of Dr. Andrew Fabrique began meeting regularly to study pathology. This group was formalized in 1888 as the Wichita Pathological Society.⁶ According to Bonner,⁷ "Kansas was the plague spot of the nation in its indiscriminating licensing of doctors." Wichita was no exception. There were many practicing medicine who were poorly trained — and some were outright quacks.⁸ The stated purpose of the Wichita Pathological Society directly addressed the problem by pledging "to study the advancement of medicine and to enlighten the people of Wichita about quacks and unethical doctors."⁹

Several medical schools were started in Kansas following the Civil War, and most were proprietary. Bonner states that "scarcely a city of any size in Kansas escaped the organization of a medical college though few went beyond the charter stage."¹⁰

Wichita's first medical school opened at Garfield University on October 1, 1889. Dr. Fabrique was undoubtedly instrumental in starting that department, since he was president of the Wichita Pathological Society and that group became the majority members of the medical school faculty. Although it was also called the Wichita Medical College, the Garfield University 1887-88 register lists medicine as one of its departments.¹¹ The establishment of a medical department at Garfield University was editorially supported by the *Kansas Medical Journal*. The editorialist stated:

"We are personally acquainted with several of the faculty, and frankly say they deserve the support of the profession of the state and adjoining states.

As a faculty, it contains some of the best men in Kansas. They are educated gentlemen, progressive, up in the profession, and we think have staying qualities."¹²

The 1888-89 *Garfield University Register* announced the opening of the medical school and stated, "Our location and our railroad facilities are such as to make Wichita accessible to more

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Garfield University, 1887. Note that the entrance and most of the building were unfinished. (Photo courtesy Wichita Sedgwick County Historical Museum)

people of the Southwest than any other city of the state and therefore better situated for establishment of a medical college.” The published goal was to “elevate the standard of medical education. The course of instruction will consist of didactic lectures, quizzes, recitations and laboratory work.”¹³

A three-year curriculum was planned. The following departments were listed in the register: anatomy (2 years); physiology; medical chemistry and toxicology; normal and pathological histol-

TABLE 1.
GARFIELD UNIVERSITY MEDICAL FACULTY,
1887-88

H.W. Everest, A.M., LL.D., Chancellor
J.E. Oldham, M.D., Dean, Diseases of Women and Children and Clinical Gynecology
T.A. Graham, M.D., Theory and Practice of Medicine and Clinical Medicine
A.H. Fabrique, M.D., Obstetrics and Clinical Gynecology
K.F. Purdy, M.D., Principles and Practice of General and Clinical Surgery
J.S. Foote, M.D., Physiology and General Pathology
Samual Ayers, A.M., M.D., Operative and Minor Surgery, and Diseases of the Rectum
F.L. Hinsdale, M.D., Descriptive Anatomy and Clinical Surgery
W.E. Shastid, A.B., M.D., Medical Chemistry and Toxicology
George Emerson, M.D., Orthopedic Surgery

Materia Med. and Therapeutics

S.A. Buck, M.D., Hygiene and State Medicine
W.A. Jordon, M.D., Surgical Anatomy and Pathology and Clinical Surgery

TABLE 2.
GARFIELD UNIVERSITY MEDICAL FACULTY,
1888-89

C.C. Furley, M.D., Professor of Anatomy and Clinical Surgery
W.H. Wells, M.D., Professor of Diseases of the Mind and of the Nervous System
C.E. McAdams, M.D., Professor of Diseases of Children and Clinical Medicine
J.D. Van Nuys, M.D., Professor of Physical Diagnosis and Clinical Medicine
E.E. Hamilton, M.D., Professor of Ophthalmology and Otology
C.G. McCollough, M.D., Professor of Obstetrics and Diseases of Women
G.M. Bibbee, M.D., Professor of Genito Urinary Diseases and Dermatology
J.H. Fordyce, M.D., Professor of Physiology
J.Z. Hoffman, M.D., Demonstrator of Anatomy

ogy; theory and practice of medicine; surgery (“the various operations in surgery will be demonstrated on the cadaver”); obstetrics (“obstetrical operation will be demonstrated on the manikin”); gynecology; physical diagnosis and clinical medicine; materia medica and therapeutics; diseases of children; diseases of the mind and nervous system; ophthalmology; and otology. The register reported that “clinical instruction and study of disease at the bedside will constitute an important feature.” St. Francis Hospital and The Wichita Hospital were listed and “will be the services of the medical school in its clinical material.”

The faculty members listed in the 1887-88 register are listed in Table 1.¹⁴ The register for the 1888-89 session listed the same faculty, except for Dr. Ayers, and added the physicians listed in Table 2. The requirements for admission as enumerated in the 1888-89 register appear in Table 3.

Financial problems plagued Garfield University from its start. It closed in 1890, received a short reprieve, and reopened for a few months under a new charter as Garfield Central Memorial University,¹⁵ before closing permanently. It had not operated long enough to graduate any students.

After lying unoccupied for several years, the Garfield property was purchased by a St. Louis investor, James Davis, who deeded it to the Society of Friends. Friends University opened in 1898, and the original Garfield building, now named Davis Hall, remains the hallmark building of the campus and a well recognized Wichita landmark.

The only remaining medical college in Kansas is

TABLE 3.
REQUIREMENTS FOR ADMISSION, 1888-89

Any one of good moral character who can present evidence of a good English Education may become a first year student of this school.

EXPENSES:

Fee for matriculation	\$ 5.00
Fees for full Course of Lectures	\$50.00
Fees for Final Examination	\$25.00
Demonstrator's Ticket with Material	\$10.00
Ticket for Single Lectures	\$10.00
All fees payable in advance.	
Special course in Chemical and Histological Laboratories	\$10.00

the thriving University of Kansas Medical School, with campuses in Kansas City and Wichita. An interesting coincidence is that the official Kansas Secretary of State registration of Garfield University in 1886 was signed by Secretary of State E. B. Allen, a pioneer physician for whom the E. B. Allen Hospital was named. The renovated E. B. Allen Hospital now houses the University of Kansas School of Medicine's Wichita campus.

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PRESIDENT'S MESSAGE

(Continued from page 110.)

truly given of yourselves and your talents. Usually, the reward is simply the personal satisfaction of knowing you have contributed to the lifelong educational process of our young physicians.

Let us all continue to avail ourselves of every opportunity to touch bright young minds and share with them that spark that led us to our calling. Let us continue to share our knowledge with today's students, to let them view the physician-patient relationships that most of us have spent our practice lives developing. And let us always share with them the joys that make the practice of medicine a true art.



CARDIOVERTER-DEFIBRILLATOR

(Continued from page 124.)

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University of Kansas School of Medicine-Wichita: Twenty Years and Beyond

WILLIAM J. REALS, M.D.,* AND JOSEPH C. MEEK, M.D.,† *Wichita*

Before the turn of the century, Wichita was a prairie outpost on the Arkansas River. It boasted hotels, saloons, livery stables, churches, elementary schools — and the Wichita Medical College, an institution with a career so brief it closed before graduating a single student. Nevertheless, it represented the first effort in the city to educate young men (no women in those days) to become physicians. As Wichita grew, doctors of medicine moved there, most notably the famous Dr. Andrew Fabrique, the founder of medical practice in Wichita and the surrounding area. His influence reached into the 20th century because of his leadership, knowledge and medical skills.

Due to the number of physicians (some of whom were Civil War veterans) arriving to practice in the city, hospitals were built. These included St. Francis Hospital, now St. Francis Regional Medical Center; the Wichita Hospital, which today is the modern St. Joseph Medical Center; and the Wesley Hospital, now Wesley Medical Center. All three institutions continue their long tradition of caring for the sick and providing medical education within their walls.

By the turn of the century, Wichita had a reputation for excellent medical care, given the strictures and limitations of doctors and hospitals at that time. For the first part of this century, citizens of the state looked to the Kansas University Medical School in Kansas City for leadership, and the medical school possessed great influence as a source of medical education, postgraduate training and continuing medical education for practitioners throughout the state.

Following World War II, the University began a series of postgraduate training programs that were carried to the practicing physicians in their home towns by a distinguished faculty, who made

the trips to introduce the state's physicians to the latest techniques.

The Foundation Is Laid

In the 1960s, unrest grew throughout the state due to the lack of physicians in many smaller towns, especially in central and western Kansas. As older physicians retired or died, they were not replaced by young physicians. Political pressure began to build as residents of smaller cities complained to their legislators of the lack of health care, or the long journeys required to reach a medical center.

During debates in the Kansas Legislature, proposals surfaced for a four-year medical school in the Wichita area. In 1969, a proposal by the University of Kansas was approved by the Board of Regents and the Legislature to accomplish reforms, including shortening the medical school curriculum to three years, thus graduating more physicians. Additional changes included an increase in class size at the University of Kansas School of Medicine from 125 to 200 students, establishment of a Department of Family Practice, and extension of residency training to all campus sites.

In November 1970, the University of Kansas Medical Center requested approval for expansion and development of health education programs in Wichita and Topeka to help counteract the doctor shortage. The Board of Regents took the proposal under advisement.

In 1971, discussions took place involving the Medical Society of Sedgwick County; hospital officials; Dr. D. Cramer Reed, then Dean of the Wichita State University College of Health Related Professions; and Dr. William Rieke, then Vice Chancellor of the University of Kansas School of Medicine. These discussions resulted in the formation of a medical society advisory committee to investigate the feasibility of a medical school in Wichita.

In September 1971, the Board of Regents authorized the creation of the Wichita State University Branch of the University of Kansas School of

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Medicine and recommended funding for a one-year budget. Dr. D. Cramer Reed was named as Dean, while still retaining the title of Dean of the College of Health Related Professions. The development of the Wichita Branch, in conjunction with increased student population and curriculum changes at the KU Medical Center, was a major effort to increase the number of Kansas physicians in training and thus to produce more graduates who might seek practice sites in the state. In December 1971, the Board of Regents gave approval to Drs. Rieke and Reed to begin development of the organizational structure of the Branch. It was to be a community-oriented medical school, utilizing the excellent clinical facilities already available in Wichita's hospitals.

In January 1972, Governor Docking asked the Legislature for full funding of the WSU Branch. As a result, nine full-time faculty positions were funded for a total budget of \$153,000. In August 1972, headquarters for the school were established in a small cottage at 3720 E. 17th Street, close to the Wichita State University campus. By February 1973, three departmental chairs were appointed: Dr. George Farha, Chairman of Surgery; Dr. Daniel Roberts, Chairman of Obstetrics and Gynecology; and Dr. Richard Guthrie, Chairman of Pediatrics.

In March 1973, a bill in the Legislature proposed the transfer of the E. B. Allen Memorial County Hospital to the state for use by the new branch. The bill died in committee the following month.

Growth and Accreditation

The small cottage on the WSU campus that housed the branch became inadequate, so the school and its headquarters were moved to the fifth floor of the Fairmount Towers dormitory adjacent to the WSU campus. Shortly after the move, Dr. George Dyck was appointed Chairman of the Department of Psychiatry.

In January 1974, the school came of age with the arrival of the first class of 15 medical students to begin their clinical training at the WSU campus of the University of Kansas School of Medicine. Later that year, Dr. Douglas Voth was named Chairman of the Department of Internal Medicine.

In the fall of 1974, the Liaison Committee on Medical Education (LCME) made an accreditation visit to the University of Kansas School of Medicine in Kansas City, and part of the team visited the University of Kansas campus in Wich-

ita. The University was later informed that both campuses were fully accredited for the education of physicians.

At commencement at the University of Kansas in May 1975, 14 graduates of the Wichita campus received their M.D. degrees. Later that year, Dr. D. Cramer Reed was promoted to Vice Chancellor for the campus. Also in 1975, the continuing growth of this campus forced the medical school to relocate from the Fairmount Towers.

A Home of Its Own

Sedgwick County entered into a contract with the school for the campus to move to the E. B. Allen Memorial County Hospital at 1001 N. Minneapolis. The school leased the clinic area, the third floor of the main building and the second floor of the annex. The move to E. B. Allen was to be temporary pending completion in 1979 of a new health science building on the WSU campus. But in their meeting in December 1977, the Board of Regents decided that the medical school should remain at the Allen Hospital instead. Plans to share the building with the College of Health Related Professions had not proved feasible, due to the continuous growth of both institutions.

In June 1978, Dr. Reed resigned as Vice Chancellor and Dean, and Dr. Richard Walsh was appointed to succeed him.

By 1979, the recommendations of the Interim Committee on Medical Education in the Kansas Legislature approved the E. B. Allen Hospital as the permanent home for the University of Kansas School of Medicine-Wichita. A three-phase, \$4.2 million renovation plan was tentatively approved. In that same year, an extensive search for a Family Practice Chairman was concluded with the appointment of Dr. E. P. Donatelle.

By 1980, the University of Kansas School of Medicine in Wichita assumed full educational responsibility for the Wesley Family Practice Residency Program, and a family practice center had opened in the Medical Arts Tower at 3243 E. Murdock. In May 1980, Dean Richard Walsh resigned, and in July Dr. William J. Reals was named Dean.

In March 1981, Dr. Neil Roach was named Chairman of the Department of Psychiatry, replacing Dr. George Dyck, who had resigned. In that same year, Dr. Richard Guthrie resigned as Chairman of the Department of Pediatrics in order to take a sabbatical at the University of Miami. In June, the long-awaited renovation of the Allen

Hospital began with the first of a three-phase program. Faculty, staff and students endured dust, noise and dislocation as the renovation program proceeded.

Faculty and Administration

Much progress has been made since the 1968 suggestion to expand medical education in Kansas. The faculty has grown from three chairs in 1973 to 65 full-time and 65 part-time members. There are 574 volunteer faculty members as well. The school employs 110 unclassified and 66 classified personnel. As of June 1, 1995, a total of 889 medical students have completed their clinical training in Wichita.

Since July 1981, the school has been operating at full capacity, with a total of 100 medical students in two classes of 50 each. In 10 years, the budget has increased from \$153,000 to \$13 million. The long course from the original concept of medical education in Wichita to 1995 spans 20 years of progress serving the needs of medical education, as well as providing expert medical care in the outpatient clinics and offering continuing medical education for physicians in the city. The school is involved in health care outreach in a variety of ways, and it supports facilities and scientists engaged in biomedical research.

A major development in 1989 was the formation of the Wichita Center for Graduate Medical Education (WCGME), an organization of the medical school and area hospitals that acts as an administrative and financial agent to serve the needs of all the residency programs in the city. WCGME is composed of the following residency programs: three family practice programs, pediatrics, surgery, obstetrics and gynecology, psychiatry, radiology, anesthesiology, internal medicine and orthopedic surgery. The school is fortunate in having Mr. Bill Kimble, who served a number of years as Vice President for Medical Education at Wesley Medical Center, as the center's director. He possesses an extensive background in graduate medical education, and under his supervision the center manages 241 residents and a budget of \$12 million annually. The WCGME is unique in that the school sought and obtained permission from the Health Care Finance Administration for the pass-through for medical education to be sent to the center via the individual hospitals. Thus, by commingling resources from the federal government and other sources, the program is well managed. The center has decreased the need for hospitals to maintain separate staffs to direct, ad-

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minister and monitor the residents. The entire process of matching residents for Wichita's hospitals is now carried out through this office and has been remarkably successful in enhancing the graduate medical education programs.

The campus is now complete and comprises research laboratories, classrooms and a large patient clinic. It is linked to the University of Kansas Medical Center in Kansas City by a two-way video system for conferences and meetings.

Two new buildings are soon to be added: the Kansas Health Foundation Center for Primary Care and the Daniel K. Roberts Women's Research Institute. Both will be connected to the main building. In addition, Sedgwick County is building a forensic science center just north of the campus to house the county coroner's office and to serve as a laboratory for the investigation of sudden and unexplained deaths and for other forensic needs.

Into the Future

The medical school at 20 years of age is at the dawn of a new era. Many changes are underway, not only in medical education but also in medical practice, with emphasis on treatment outside the traditional hospital and more care in outpatient facilities. Fortunately, the school, through its graduates and close linkage with the Kansas City campus, is in a position to stay abreast of changes, to monitor new developments, and to pass on this information and knowledge to its students, residents and staff.

With the opening of these additions to the campus, the dream of the founders to create a complete and fully functional clinical campus for medical education will be realized. From basic biomedical research to community education of health professionals, UKSM-W is now an established academic health center. Students entering the Wichita program in their third year of medical education can find a high-quality, clinically rele-

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vant, comprehensive medical program that will shepherd them through their training and into a well prepared career for a productive medical practice.

Despite these successes, challenges await the school as we consider the future of medical education. The current foundations of medical training based on inpatient education at tertiary care institutions are being replaced by new structures embracing ambulatory care, with a heavy emphasis on comprehensive, first-encounter medicine delivered in a cost-effective manner. More and more, medical education will be constructed about a tight-knit unit of physicians and other health care providers who promote prevention of illness and maintenance of healthy life styles as the mainstay of a cost-effective health care delivery system. The purchasers of health care will, to an increasing extent, determine the quantity, availability and delivery of health care. The role of the physician in this new paradigm is far from clear — but it will be changed.

As it moves into the next century, an academic health education center such as the University of Kansas School of Medicine and its clinical campus in Wichita will be required to develop new strategies for medical education and research in order to maintain its current strength as a premier state-supported institution.

Fortunately, the school has recently been the recipient of a major grant from the Kansas Health Foundation, which will enable both campuses to provide the needed changes in medical curriculum to allow the education of our students to stay relevant and current. Moreover, the grant will, for the first time, allow the University of Kansas Medical School to become a true partner with all the educational, research and care-giving institutions in the state.

Ultimately, Kansas has an opportunity to become a national model in a new format for medical education. From high school to community practice, from college preparation to addressing new health care needs of Kansas' citizens, from technologically sophisticated procedures to humanistic application of total health care, from new knowledge bases in fundamental biocellular functions to population-based, quality health care programs, the University of Kansas School of Medicine will be able to move freely throughout the State of Kansas to bring the kind of medical education to our students which ensures that the Kansas-trained physician of the future will measure up to the standards set by our predecessors.

Implantation of Transvenous Implantable Cardioverter-Defibrillator by Electrophysiologists: One-Year Experience

ROBERT T. TUNG, M.D.,* AND ASHOK K. BAJAJ, M.D.

The implantable cardioverter-defibrillator (ICD) has been proven effective in reducing the incidence of sudden arrhythmic death in patients with life-threatening ventricular arrhythmias.^{1,2} Since its clinical introduction by Mirowski et al.,³ ICD technology has evolved significantly. With recent availability of two transvenous lead systems (CPI Endotak-C tripolar lead, Cardiac Pacing Inc., St. Paul, MN; and Medtronic Transvene lead, Medtronic Inc., Minneapolis, MN), most ICDs could be implanted without thoracotomy by electrophysiologists.^{4,5,6} Prior to February 1994, at Wesley Medical Center and St. Francis Regional Hospital in Wichita, all ICDs were implanted in an operating room by surgeons with the assistance of an electrophysiologist. This report summarizes the first year's experience of transvenous ICD implantation by electrophysiologists in an electrophysiology laboratory.

Methods

Patients. From February 1994 to January 1995, 34 consecutive patients undergoing an ICD implantation were included in this study. Patients' characteristics and baseline electrophysiologic data are summarized in Table 1. All patients underwent baseline electrophysiology studies except those whose medical conditions prohibited such studies, or whose arrhythmias required empirical antiarrhythmic therapy. The aim of electrophysiology study was to rule out causes

TABLE 1.
PATIENT CHARACTERISTICS BASELINE
ELECTROPHYSIOLOGIC FINDINGS

Male:Female	27:7
Age, y (range)	58 ± 18 (22-81)
Coronary artery disease	24 (71%)
LV ejection fraction	33 ± 14%
Clinical arrhythmias	
SMVT	19 (56%)
VF	14 (41%)
Syncope ± NSVT	1 (3%)
Baseline EPS	29 (85%)
Induced Arrhythmias	
SMVT	18
PMVT/VF	4
Noninducible	7
Empirical AA therapy	5

Abbreviations: LV = left ventricle; SMVT = sustained monomorphic ventricular tachycardia; VF = ventricular fibrillation; NSVT = nonsustained ventricular tachycardia; EPS = electrophysiology study; PMVT = polymorphic ventricular tachycardia; AA = antiarrhythmic agents.

of sudden cardiac death/syncope other than ventricular tachyarrhythmias. Informed patient consents were obtained, and study protocols of investigational devices were approved by the Institutional Research Board of either Wesley Medical Center or St. Francis Regional Hospital.

Procedure. Laboratory staff included a team of two electrophysiologists, two to three electrophysiology nurses or technicians and one device representative. One of the electrophysiologists performed the ICD implantation, while the other was responsible for intraoperative electrophysiologic testing of the device.

The implantation procedure has been described in detail previously.⁶ In brief, after an overnight fast, patients were brought to the electrophysiology laboratory and prepared, draped in strictly sterile fashion. Deep sedation was achieved with intravenous midazolam and fentanyl prior to defibrillation threshold testing. Blood pressure and O₂ saturation were monitored

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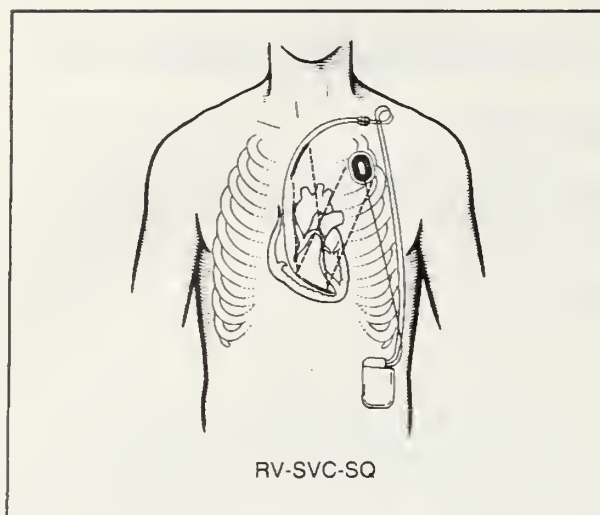


Figure 1. An ICD with three-lead system in which right ventricular (RV) lead is cathode, subcutaneous (SQ) patch and superior vena cava (SVC) lead are anodes. The dashed lines indicate current vectors. (From Medtronic Inc., Tachyarrhythmia Technical Concept Paper, vol. 1, no. 7, 1994. Reprinted with permission.)

closely. External defibrillation patches (R-2, Medical System, Niles, IL) were placed at the left scapular area and right anterior upper chest and connected to an external defibrillator (Zoll PD 120, Zoll Medical Corp., Burlington, MA), with a second backup defibrillator available during all implantations.

After local anesthesia with 1% lidocaine, a left subclavian percutaneous venous puncture or cephalic vein cut-down was made and a J-guide wire was advanced to the superior vena cava. Subsequently, an incision was made in the left infraclavicular region and a subcutaneous pocket was formed overlying the pectoralis fascia. A split-sheath introducer was placed over the J-guide wire. The dilator and J-guide wire were removed, and the ventricular defibrillation lead was inserted and advanced into the venous system. Subsequently, a J-guide wire was reintroduced and the sheath peeled away. Under fluoroscopy, the lead was positioned at the right ventricular apex. After appropriate sensing and pacing thresholds were obtained, the ventricular lead was secured to the pectoralis fascia using sutures and two lead-anchoring sleeves. With the Medtronic Transvene lead system, a second defibrillation lead was placed at the junction of the proximal superior vena cava and the left innominate vein, or a subcutaneous patch was placed in the prepectoral region.

After ventricular fibrillation was induced, defibrillation capability of the lead system was always first tested with the right ventricular lead as cathode at an energy level of 24 joules via an external cardioverter-defibrillator. If a 24-joule shock was successful in defibrillating the patient, another subsequent attempt of ≤ 24 joules was tested before proceeding with the final testing of an ICD. If the initial 24-joule shock was not successful, the system was retested with reversed lead polarity prior to placing a subcutaneous patch at either the left pectoral region or left mid-axillary region (figure 1). In many patients, to avoid a prolonged period of testing and shorten the duration of deep sedation, no attempt was made to find the lowest level of energy to defibrillate unless study protocol required such testing for investigational devices. In patients with clinical ventricular tachycardia, antitachycardiac pacing therapy by the device was also evaluated and programmed appropriately.

Subsequently, an abdominal pocket was formed in the upper left quadrant of the abdomen overlying the external oblique fascia, and leads were tunneled in the subcutaneous plane from the left intraclavicular incision to the abdominal pocket using a CPI tunneller. In five patients, Medtronic Jewel 7219D or 7219C devices (Medtronic Inc., Minneapolis) were implanted in the

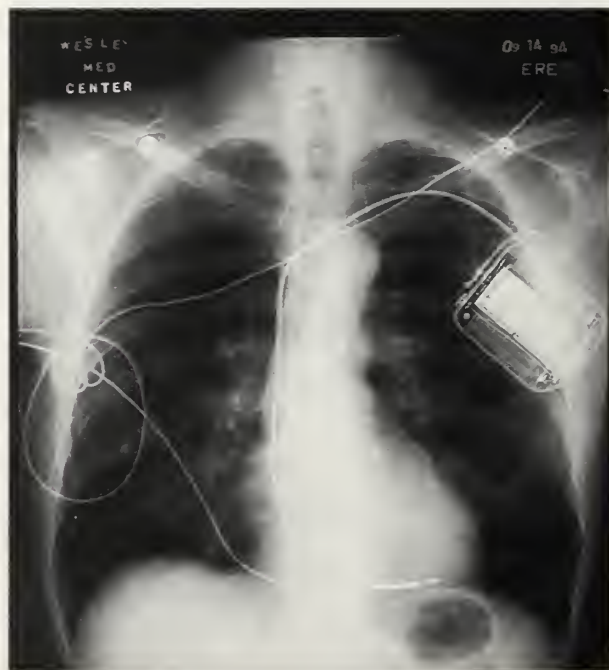


Figure 2. Chest x-ray of a patient with a pectoral implanted Medtronic Jewel 7219C device and a Medtronic Transvene lead at right ventricular apex.

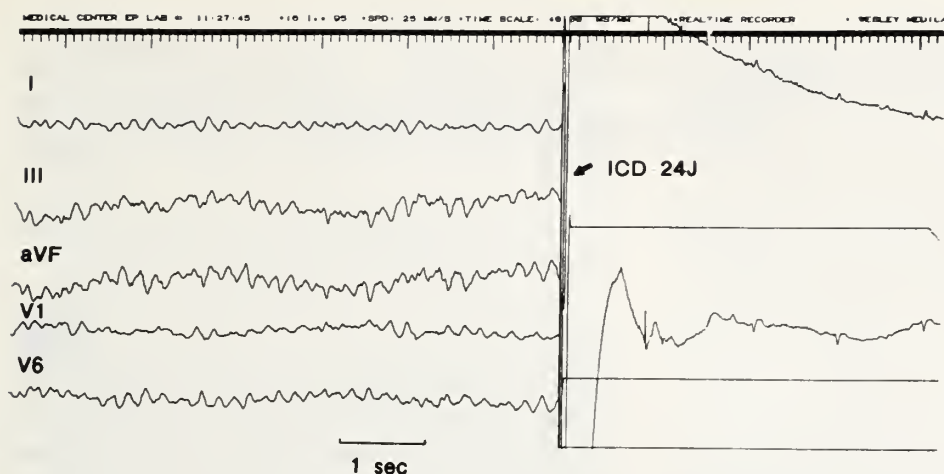


Figure 3. Electrocardiographic (ECG) recordings of induced ventricular fibrillation that was detected appropriately by an ICD and converted to sinus rhythm by a 24-joule shock (arrow). From top to bottom are ECG leads I, III, aVF, V1 and V6.

pectoral region (figure 2). Subsequently, all leads were connected to the generator, and the device was required to recognize and terminate the induced ventricular fibrillation (figure 3). Deep tissues were closed with sutures in two layers and the skin was closed in a subcuticular fashion. Finally, appropriate detection and therapy for ventricular tachycardia/fibrillation were programmed, and the device was activated.

Sedation time was defined as the time from the first to the last dose of intravenous sedation. Implantation time was measured from the beginning of local anesthesia to the completion of skin closure.

Follow-up. All patients were followed up as outpatients at one week for suture removal and at four weeks, when patients were evaluated by ECG, chest x-ray and ICD check. Defibrillation testing of the device was performed two to four months after implantation.

Results

In the present study, transvenous ICD implantation was successful in all patients, and 33 of 34 patients were discharged alive from the hospital. One patient died due to worsening of refractory ventricular arrhythmia 15 days postoperatively while being loaded with amiodarone in the hospital. This patient, with a left ventricular ejection fraction of 20%, had successful ICD implantation with a defibrillation threshold ≤ 12 joules. She had no hemodynamic difficulties either intraoperatively or immediately following the procedure.

For those patients whose lowest defibrillation threshold was not determined, the defibrillation threshold was ≤ 24 joules in 13 patients, and ≤ 25 and 26 joules in one patient each. One patient had no inducible ventricular fibrillation despite

multiple attempts. The mean number of shocks during implantation was 6.5 ± 4.4 (range: 3-21). Of the remaining 18 patients whose actual defibrillation threshold was tested, mean defibrillation threshold was 13.8 ± 5.2 (range: 5-20) joules and mean number of shocks was 5.2 ± 2.5 (range: 2-13).

Local anesthesia with 1% lidocaine and IV sedation were used during all implantations. Mean amounts of intravenous fentanyl and midazolam used were 2.51 ± 1.05 (range: 1.02-5.06) and 210 ± 85 (range: 110-469) mcg/kg, respectively. Mean sedation and implantation time were 139 ± 51 (range: 57-262) and 131 ± 49 (range: 50-220) min, respectively. All patients were returned to a monitored bed after the procedure.

Complications. No intraoperative complications or deaths occurred. One patient died postoperatively from refractory and incessant ventricular tachycardia/fibrillation. Minor complications occurred in two patients: one minor abdominal pocket hematoma, which resolved without any intervention; and one with incision-site cellulitis requiring intravenous antibiotic therapy. The mean time between implantation and hospital discharge was 2.8 ± 2.1 (range: 1-8) days.

Follow-up. During follow-up, three patients died, one postoperatively. Two died two and 13 weeks after hospital discharge, respectively. One patient was lost to follow-up. Early and late follow-ups were obtained in all the remaining 30 patients, and no complications were observed. Patients were specifically asked about discomfort or pain during the procedure, and none recalled pain or shocks except one who recalled one of five shocks during implantation. The mean follow-up was 29.3 ± 14.3 (range: 11-61) weeks. All devices were functioning appropriately during fol-

low-up except in one patient, who required ICD system revision with the addition of a subcutaneous patch because of elevated defibrillation threshold during follow-up. Twelve patients (40%) received appropriate and successful ICD therapy for sustained ventricular arrhythmias as determined by detailed history data retrieved from the device telemetry and/or symptoms prior to the device therapy. Three patients (10%) received inappropriate device discharges for atrial arrhythmias.

Discussion

This report describes the first-year experience of transvenous ICD implantation by a team of two electrophysiologists in an electrophysiology laboratory.

Smaller pectoral implanted ICDs (Medtronic Jewel 7219D/C) were still investigational in the United States during the period of present study. (The 7219D devices were approved by the FDA in April 1995.) These devices have been reported effective and simpler to implant than conventional ICDs.^{7,8} Five out of 10 patients who received such ICDs had devices implanted in the left pectoral region. At the present time, the size of most ICDs still requires that they be implanted in an abdominal pocket. Therefore, the complexity of implantation is greater than that required for pacemaker implantation. Our experience indicates that sufficient experience in pacemaker implantation and familiarity with abdominal and chest wall anatomy are the prerequisites for successful transvenous ICD implantation by an electrophysiologist. Dedicated support staff including a second electrophysiologist, familiarity with the electrical equipment, and quality fluoroscopy in the electrophysiology laboratory are also essential. The mean time for ICD implantation was only 131 ± 49 (range: 50-220) min in our experience, which compared favorably to previous reports.^{4,7,9}

At most institutions, transvenous ICD implantations are performed under general anesthesia because of multiple incisions, lead tunneling and the perceived need for intubation during induction of ventricular fibrillation. Complications (4%) directly related to intubation and general anesthesia during ICD implantation have been reported.⁹ All ICD implantations in this study were performed using local anesthesia and IV sedation. The experience of ICD implantation without general anesthesia at our institutions was recently reported.⁶

Most of our patients were discharged within one to two days after the procedure unless other medical problems required a longer hospital stay. Mean time between ICD implantation and discharge was 2.8 ± 2.1 days, which was considerably shorter than the mean of 3.8 ± 0.8 to 5.4 ± 2.2 days reported by others utilizing general anesthesia during ICD implantation.^{4,9}

One patient died postoperatively of refractory, sustained ventricular arrhythmias, which likely reflected her underlying heart disease or possible pro-arrhythmic effects of amiodarone, rather than directly relating to the procedure itself. Minor complications occurred in only two patients. The incidence of incision-site hematoma (1/34) and cellulitis (1/34) was similar to other large series.^{4,5,10} No pulmonary or hemodynamic complications related to potential intubation and general anesthesia were observed in our patients. The overall complication rate of 8.8% (3/34) was considerably lower than that of 16-22% reported by others.^{4,5,10} This lower complication rate was attributable at least in part to strict sterile technique, availability of quality radiographic equipment and experienced personnel in the electrophysiology laboratory.

The overall survival rate was 91% at a median follow-up of 30 weeks. One patient was lost during follow-up. Three others died, one postoperatively, one after unsuccessful resuscitation for a witnessed sudden collapse, and one of unknown causes. ICD system revision was performed in one patient because of elevated defibrillation threshold. Among 15 patients who received ICD therapy, three had inappropriate shocks for supraventricular arrhythmias.

Conclusions. The present study summarizes our first-year experience with transvenous ICD implantation and demonstrates that ICD could be successfully and safely performed by a team of two electrophysiologists in an electrophysiology laboratory without general anesthesia.

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(Continued on page 116.)

Is Intensive Care Necessary Following Carotid Endarterectomy?

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Many efforts have been made to curb escalating health care costs in the United States. A significant cost incurred by many surgical patients, including those undergoing carotid endarterectomy, is admission to the intensive care unit. Historically, all patients undergoing carotid endarterectomy were transferred postoperatively to the intensive care unit. Although favorable reports have been published regarding the safety of monitoring post-endarterectomy patients on a regular surgical ward,^{1,2} this practice remains somewhat controversial. Consequently, a study was undertaken to determine if this practice would be safe in our medical community.

Methods

A prospective study was developed in which 151 consecutive patients undergoing 168 elective carotid endarterectomies, by a single vascular surgeon, were enrolled from October 1993 to October 1994. Seventeen of these patients underwent staged, bilateral operations. Ninety patients (59.6%) were male. The average patient age was 76.3 years, with a range of 42 to 91 years. Of the 168 carotid endarterectomies, 120 were performed for symptomatic lesions. These symptoms included typical carotid territory symptoms of contralateral hemiparesis, dysphasia, or ipsilateral amaurosis fugax. The remainder of the patients (n = 48) underwent surgery for asymptomatic lesions or for nonhemispheric symptoms. All but eight patients underwent intra-arterial digital subtraction arteriography. Of the patients who did not undergo arteriography, two duplex carotid scans, at two different vascular laboratories, were performed. All of these eight patients were symptomatic. Symptomatic patients with >50% diameter-reducing lesions received operative intervention. Also, symptomatic patients (n = 6) with 50% lesions underwent surgery when they

broke through anti-platelet therapy and demonstrated no significant cardiac reason for their symptoms, either by history, echocardiography, or 24-hour cardiac rhythm monitoring. All asymptomatic patients undergoing surgery were subjected to arteriography and demonstrated lesions that reduced the vessel diameter by $\geq 80\%$.

Patients were admitted on the day of operation, except for two who underwent coronary artery bypass. (Comments in this paragraph regarding perioperative care exclude the two patients who required coronary artery bypass and carotid endarterectomy, one concomitant and one staged.) Aspirin was begun preoperatively and was continued postoperatively. The operations were performed under general anesthesia using continuous arterial pressure monitoring. Blood pressure was kept near the physiologic range for each particular patient utilizing vasoactive medication as necessary. Central venous and pulmonary arterial catheters were not used in any patient. Systemic heparinization was instituted; shunts were placed for previous history of stroke, contralateral internal carotid occlusion, or inability to palpate a carotid back pulse.³ Low-molecular-weight dextran infusion was initiated in the operating room and discontinued after 500 ml were infused at 25 to 50 ml per hour, depending on the age and weight of the patient. Protamine sulfate was given to reverse half the heparin previously administered.

Patients were observed in the recovery room for 1½ to 2½ hours. The decision was then made to discharge the patient to a regular surgical floor or to the intensive care unit. This decision was based primarily on the stability of the patient's blood pressure. If blood pressure was stable for one hour without medications, patients were discharged to the regular surgical floor and placed on telemetry for 12 to 24 hours. If blood pressure was unstable, either excessively high or low, the patients were discharged to the intensive care unit.

Complications, including cardiac and neuro-

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logic, were monitored. Postoperative hospital stay was tabulated. All patients were followed on an outpatient basis during the first and fourth postoperative weeks.

Results

Of the 168 endarterectomy patients, 137 were discharged to a regular surgical floor. Nineteen were discharged to the intensive care unit because of either hyper- or hypotension, which lasted for longer than the 2½ hours of observation in the recovery room. The remaining 12 endarterectomy patients were discharged to the intensive care unit for other reasons, including pharyngeal dysmotility, history of severe cardiac disease, or perioperative arrhythmias. No patients who were initially sent to the regular surgical floor required subsequent transfer to the intensive care unit.

None of the patients in this particular series suffered clinically suspected postoperative myocardial infarction. Other complications identified in these patients included four strokes, three of which were ischemic and one hemorrhagic. Two patients who suffered stroke, one ischemic and one hemorrhagic, died. One patient suffered a transient ischemic attack, was returned to surgery and was found to have platelet aggregation, which was removed. This patient subsequently did well and was discharged on the second postoperative day. One patient developed pulmonary edema, due to excessive intravenous fluid administration intraoperatively, which responded rapidly to diuresis. Cardiac enzymes and ECG on the first and second postoperative days did not demonstrate myocardial infarction and this patient was dismissed on the second postoperative day.

One patient who developed a cervical hematoma requiring reoperation was dismissed on the second postoperative day. Two patients developed pharyngeal dysmotility due to high carotid dissections that were necessary to fully remove the plaque. These patients required hospitalization for four days and six days, respectively. One of these patients needed outpatient tube feedings and spontaneously resolved within eight weeks.

The average postoperative hospital stay in the

uncomplicated cases was 1.4 days, 93 patients being dismissed on the first postoperative day. When all cases were tabulated, including the two patients who underwent coronary artery bypass grafts, the hospital stay averaged 1.6 days. During follow-up no patient complained of new angina or shortness of breath, and no new carotid territory symptoms were identified.

Discussion

Previously, all patients undergoing carotid endarterectomy were discharged to the intensive care unit postoperatively. With increasing emphasis on cost containment, all aspects of patient care and expenditure are being evaluated more critically. Certainly, one significant expense incurred during hospitalization is intensive care monitoring, which at our institution is approximately \$1395 per day (base rate), compared to a regular room rate of \$505 per day. Results of this study demonstrated that 82% of our patients were able to forego the expense of intensive care monitoring. This was possible without any deleterious effects and, in fact, no patients in this series suffered a clinically apparent myocardial infarction within 30 days of the operation. Furthermore, the 2.4% occurrence rate of stroke in this series is consistent with the current vascular surgical literature.⁴ It is, therefore, clear that the lack of intensive care monitoring in the majority of these patients did not adversely affect their outcome.

The results of this series indicate that selective management permits the majority of patients to be safely cared for without the need for intensive care monitoring.

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Reading Grade Levels and Health Behaviors of Parents at Child Clinics

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Abstract

Objectives. Recent reports suggest alarmingly low levels of literacy among adults in the U.S., but these are not expressed in grade levels. Assessment of the epidemiology of reading grade levels is necessary for development of patient education materials written at appropriate levels.

Methods. We measured demographics, reading ability and self-described health behaviors of 646 parents at two private, two university, two indigent and six public child-related clinics in a mid-western city using a bilingual oral interview and the Wide Range Achievement Test.

Results. Parents were 59% white, 92% female, with mean age 28 years, mean years of school 12.1 and mean reading grade 8.7. Parents tended to read four to five grades below their highest completed school grade. Analysis of self-reported health behaviors showed that 69% had no private insurance, 31% smoked cigarettes, 35% had body mass index greater than 27, and 46% of parous mothers had never breast-fed. Prevalence odds ratios showed that all adverse health risks except obesity were associated with low reading ability.

Conclusions. These findings have important implications for public health professionals working in clinical care, health education and agency policy. Persons with low literacy levels appear to be at particularly high risk for adverse health behaviors. Education materials and teaching vocabulary should be appropriate for client reading grade levels.

Introduction

Poor reading ability may adversely affect health in several ways. Inadequate reading competence impedes access to accurate health information crucial for self-help health promotion and disease prevention, access to the disease care system and access to many jobs with employer-sponsored health insurance.¹ A recent cross-sectional study of adults attending reading-assistance programs in Arizona reported a strong association between poor reading ability and poor health status.² However, no population-based data about reading abilities are available for Kansas, and little research regarding reading ability and health behavior has been reported. Therefore, we conducted a study to describe the epidemiology of parent reading abilities at 12 representative mid-western clinics, and to determine whether low literacy was associated with adverse health behaviors.

Methods

Subjects and setting. A convenience sample of 646 parents or caretakers obtaining child-related services was studied during June and July 1994. The study sites were two private pediatric clinics, two university clinics, two indigent clinics, and six Wichita-Sedgwick County Department of Community Health clinics. Sedgwick County has the highest population (403,662) of Kansas counties and is typical of many midwestern urban areas. Participation was offered to any parent or adult caretaker waiting for child-related services at pediatric, prenatal or immunization clinics. We will refer to all adult participants as parents, although a small number were another type of adult caretaker. Parent sampling was consecutive except at times of highest patient volume, when sampling was by convenience. Less than 4% of eligible parents declined to participate.

Parents who consented were given a three-minute reading test.³ Next, each parent was orally interviewed using a 36-item demographic survey, either in English or Spanish according to parent

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preference. Parent privacy was maintained by conducting interviews in private rooms. When interviewing occurred in waiting rooms, parents were offered the option of going behind partitions for privacy.

Instruments

Parent reading ability was measured using the Wide Range Achievement Test (WRAT),³ a highly accepted three-minute reading test that assesses ability to read and pronounce increasingly difficult words. It measures reading recognition rather than comprehension. Raw WRAT scores are converted to grade equivalents.

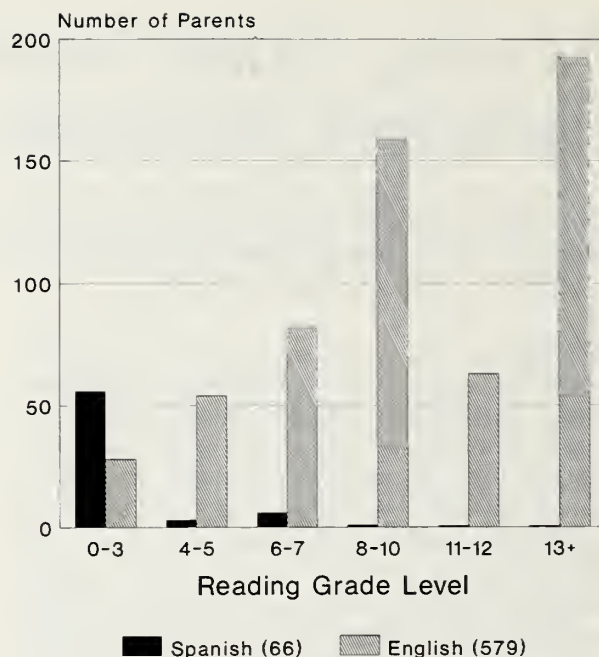
Demographic characteristics of subjects were measured using a 36-item written survey, in English and Spanish, that was developed and iteratively pretested from January through June 1994. To eliminate any difficulties in subject comprehension, the survey was administered verbally. Interviewers were five second-year medical students and three other graduate students. Three interviewers spoke Spanish, six were women and two were non-white.

Data entry was performed using CDC EpiInfo 5.01b.⁴ Descriptive statistics, odds ratios and chi-square were calculated using SAS 6.04.⁵ The study and instruments were approved by the University of Kansas School of Medicine Committee on the Rights of Human Subjects.

Results

The 644 parents ranged in age from 13 to 63, with a mean age of 27.8 years. The median and

DEMOGRAPHICS OF STUDY POPULATION (n = 646)				
	Mean	(sd)	Median	Range
Age	27.8	(7.9)	27	13-63
Years of School	12.1	(2.6)	12	2-20
Reading Grade Ability	8.7	(4.0)	9	0-13+
				Prevalence (%)
Health Insurance				76%
Indigent Clinic Site				4%
Learning Disability				7%
Female				92%
White Race				59%
Spanish-Speaking				10%
Smoke Cigarettes				31%
Obese				35%
Unmarried				44%
Parous Mothers (n = 585)				Never Breastfed 46%



Distribution of English reading levels among parents by language spoken: 12 child-related clinics in Wichita, June-July 1994.

mean self-reported last grades of school completed were 12 and 12.1 grades, respectively. Population demographics are displayed in the table. Almost half of the parents (45%) had a reading ability less than ninth-grade level, 22% had less than a sixth-grade level, and 13% had less than a fourth-grade level. Parents tended to read four to five grades below their highest school grade completed.

The sample population included a small percentage of Spanish-speaking parents (10%). The distribution of reading grade levels among parents by language spoken is displayed in the figure. Spanish-speaking parents comprised the majority of parents with zero-through fourth-grade reading levels. However, there was a remarkable percentage of English-speaking parents who also read at low levels. Forty-one percent of English-speaking parents read in the zero- to eighth-grade range.

Bivariate comparison showed significant associations between low reading ability and smoking, never breastfeeding, and lack of private health insurance, each significant at the $p < 0.05$ level. No association with obesity was found.

Discussion

These findings indicate that a surprisingly large proportion of parents have low reading ability

and may not be able to read health education materials. These parents are also most likely to need health education because of adverse health behaviors such as smoking and bottle-feeding. Persons working in public health programs should consider reading level when communicating with patients and families, and choosing and preparing written patient materials. This study confirms others⁶⁻⁷ that found functional reading level to be several grades below highest grade completed.

Comparison with DOE Data

In 1993 the United States Department of Education (DOE) Adult Literacy Study reported that 46 to 51% of American adults have low levels of literacy, defined as the two lowest levels on a five-level scale.⁸ The DOE study was not conducted in Kansas and did not measure reading grade abilities. Without knowing the epidemiology of adult reading grade ability, health educators cannot develop appropriate written materials. The DOE and these data suggest that literacy is present in a graded continuum within the entire population.⁸

Generalizability

Only English language reading ability was tested in this study. Like many states, Kansas has numerous Asian, Mexican and Central American immigrants who have moved here during the last 20 years and are now in various stages of English language assimilation.

Census data indicate that Kansas lies in the 66th percentile for prevalence of high school completion (82.2%) and 58th percentile for prevalence of college graduation among adults (22.3%).⁹ Kansas Board of Education records show that 77% of Sedgwick County ninth graders complete high school within four years.¹⁰

Because DOE data do not indicate reading grade levels, statewide literacy surveillance will be required in this and other states to better determine the epidemiology of adult reading ability. Establishment of literacy screening, referral and education services might be a powerful method of improving reading levels of young working parents, besides determining the epidemiology of reading levels among local populations served.

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ROLE OF IMAGING IN DIAGNOSIS

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The Role of Imaging in Diagnosis of Acute Appendicitis

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The diagnosis of acute appendicitis is generally based on current symptoms, physical examination and data from laboratory tests. Even with this information, diagnosis may be difficult. Data presented by Biersack (1993) clearly show wide variability in the clinical presentation of patients with a final diagnosis of acute appendicitis.¹ One third of patients with appendicitis present with pain outside the right, lower quadrant.² The lack of constancy of anatomy of the appendix is a major contributor to the atypical clinical features of appendicitis. In these patients, the use of imaging modalities is appropriate.

Anatomical Review

The base of the appendix maintains a constant relationship to the cecum; however, the cecum can vary considerably in position, and the free end of the appendix can occupy a variety of positions. The cecum can be located in the right side of the pelvis, more frequently in women; it can be located in the subhepatic space; or it can extend in a transverse fashion to the mid-abdomen. Therefore, the tip of an appendix, which can be up to 10 to 12 cm in length, can range in location throughout the right side of the abdomen, and occasionally extend to the left of midline. It can be close to the anterior peritoneal membrane, or be in a retrocecal location posteriorly in the peritoneal cavity.

The resultant diagnostic difficulty partially explains why 10% of men and up to 35% of women undergoing appendectomy are found to have normal appendices.³ Biersack (1993) reports that women between 21 and 40 suspected of acute appendicitis have a negative laparotomy rate of 45%.¹ The diagnosis of appendicitis can be particularly difficult in children, where previously undiagnosed congenital disease must be considered, as well as gastrointestinal disorders.⁴

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Imaging Comparison

To help resolve some of the problems in diagnosis of acute appendicitis, diagnostic imaging techniques have been used. The most basic examination is the abdominal film. Supine and upright abdominal films can be helpful in evaluating a patient for the presence of an appendicolith (Figure 1), for the presence of generalized ileus, and to evaluate for complications such as possible bowel obstruction or bowel perforation. However, an appendicolith is identified in less than 10% of cases of acute appendicitis.⁵ The most common finding in radiographs of the abdomen with appendicitis is the presence of localized ileus. On simple radiographs, calcification in the right lower quadrant is nonspecific and could represent a calcified lymph node or radio-opaque material in the bowel, making plain films of limited value in diagnosing acute appendicitis.

Barium enema examinations have been used to evaluate a patient suspected of having acute appendicitis. A barium enema is superior to abdominal films in that the location of the cecum can be determined, and an attempt can be made to identify the appendix. If the appendix fills with barium, appendicitis is extremely unlikely. A barium enema is also helpful in evaluating the terminal ileum, which in many cases can be visualized. Important conditions in the differential diagnosis of acute appendicitis can be identified, especially inflammatory changes in the cecum and extrinsic compression of the cecum. If the terminal ileum is visualized, then important information can be obtained regarding the possibility of inflammatory bowel disease, such as Crohn's disease. However, the appendix is seen in fewer than one-fourth the normal population; a negative barium examination which fails to visualize the appendix is nondiagnostic in a patient with suspected acute appendicitis.

Improvements in sonographic imaging in recent years make sonography an important imaging tool in the evaluation of acute appendicitis. The ultrasound diagnosis of acute appendicitis is



Figure 1: Abdomen film visualizing appendicolith (arrow).

based on identification of a fluid-filled, dilated appendix having a diameter of greater than 6 mm located anterior to the psoas muscle (figures 2 and 3). It is differentiated from a loop of small bowel by the absence of peristaltic activity, constant shape and lack of compressibility. The identification of peri-colic inflammation or abscess formation without the identification of an abnormal appendix is considered suggestive, but not specific, for appendicitis. The increased utility of sonography is due to marked improvement in equipment, operator skills and interpretive skills. Balthazar (1994) indicates that ultrasound is superior to radiography and barium enema studies for evaluating the appendix.⁶ In this study of 100 patients suspected of having acute appendicitis, 54 patients did, in fact, have acute appendicitis. Of these, ultrasound images revealed appendicoliths in 17%, phlegmon and/or abscess in 17%, and an abnormal appendix in 70%. Balthazar's analysis of ultrasound data revealed a sensitivity for appendicitis of 76%, specificity of 91%, and an accuracy of 84%, with a positive predictive value of 95% and a negative predictive value of 76% in cases where the appendix is visualized. However, in patients who did not have acute appendicitis,



Figure 2: Transverse image of a fluid-filled appendix (arrows).



Figure 3: Long axis image of a fluid-filled appendix (arrows).

sonography showed a normal appendix in only 4% and did not visualize appendices in 10% of the cases, indicating the difficulty of identifying the normal appendix by sonography. As with the barium enema, a sonographic exam which fails to visualize the appendix is nondiagnostic in a patient with suspected acute appendicitis.

CT scanning is now a significant contributor to the imaging of patients with suspected acute appendicitis with atypical presentation. CT diagnosis of appendicitis is based on identification of an abnormal appendix. Identification of peri-colon inflammation, phlegmon and/or abscess without visualization of an abnormal appendix is considered suggestive, but not specific, for acute appendicitis. The abnormal appendix on CT is identified as a small, tubular structure with a thick wall, fluid-filled content and contrast enhancement of the wall of the appendix (figure 4). CT is the most sensitive modality for identifying appendicolith formation (figure 5). In Balthazar's study of 100 patients suspected of having acute appendicitis, a confirmed, alternative diagnosis was made by CT in 22 of the 46 patients without appendicitis. There were two false negative CTs in which the appendices were visualized, but had



Figure 4: Thickened appendix with surrounding phlegmon (arrow).

collapsed, and did not show wall thickening or periappendiceal inflammation. Surgery revealed mild appendicitis in one and slight inflammation with micro perforation in the other. CT yielded 2 false positives, in which the appendix was considered slightly thickened, but showed no histopathologic findings of acute appendicitis. A study by Malone (1993)⁷ using CT scanning without oral barium and without the benefit of intravenous contrast showed an accuracy for CT of 93%, sensitivity of 87%, and specificity of 97%. Positive predictive value was 94%, and negative predictive value was 93%. Balthazar's comparison of ultrasound and CT yielded comparable figures, as seen in the table.

Another important consideration in the use of any imaging modality is cost. While the actual price of each varies from provider to provider, comparative estimates can be made. Abdominal plain films are routinely less costly than the other options, followed closely by the barium enema.

TABLE 1.
ACUTE APPENDICITIS: CT AND ULTRASOUND
CORRELATION IN 100 PATIENTS

	CT	US
Sensitivity (%)	96	76
Specificity (%)	89	91
Accuracy (%)	94	83
Positive predictive value (%)	96	95
Negative predictive value (%)	95	76

Note: Data are included for patients with nonspecific pericecal inflammation. (From Balthazar, et al., page 35)



Figure 5: Dilated appendix containing fluid and two small appendicoliths (1). Also present is mild edema of the mesenteric fat, posterior and medial to the appendix (2).

Sonography is approximately twice the charge of a barium enema. CT examination is between two and three times the cost of a sonographic evaluation. Therefore, it is imperative that the clinician take into consideration in each case both the clinical need for increasingly sensitive imaging and the resources of the particular patient, as well as the potential additional cost of either a laparoscopic or abdominal appendectomy.

Conclusion

Several imaging modalities are now available for evaluation of patients with atypical presentation of acute appendicitis. Radiographs consisting of supine and upright abdomen are a reasonable first choice, primarily to exclude bowel perforation. The next imaging procedure of choice is sonography, especially in children and young women. If an abnormal appendix is identified by sonography, then no further imaging is required. An alternative approach is to proceed from abdominal radiographs to CT scanning, in that CT is the most informative examination, with the highest sensitivity and greatest positive, as well as negative, predictive value. CT also permits the evaluation of the entire mesentery and abdominal contents for evaluation of possible complications secondary to acute appendicitis or identification of important alternate diagnoses.

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Atypical Squamous Cells of Undetermined Significance: Community Incidence and Management Review

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The Bethesda System for reporting cervical cytology was originally developed in 1988 and revised in 1991.^{1,2} The intent was to provide a uniform format for cytopathology reporting which would allow communication of clinically relevant information. The term atypical squamous cells of undetermined significance (ASCUS) was proposed to describe those cytologic specimens which showed cellular changes more marked than can be attributed to a reactive process but fall short of being diagnostic of dysplasia.

Neither the optimal rate nor the appropriate management of ASCUS is well established. The frequency of ASCUS reports varies widely from laboratory to laboratory, and there are numerous differing management approaches.³ The intent of this study is to determine the incidence of ASCUS Pap tests in two busy gynecology practices with reports provided by two different cytopathology laboratories. In addition, we hoped to determine if a dominant management scheme could be identified.

Materials and Methods

A retrospective review of the charts of all women found to have ASCUS on Pap tests from January 1, 1992 through December 31, 1992 was performed. All patients were seen by a gynecologist in one of two private practices. Each group of physicians utilized a different cytopathology laboratory. Both laboratories were accredited by the College of American Pathologists. Charts were reviewed in a systematic manner to obtain data

on each patient including age, gravidity, previous abnormal Pap tests and previous therapy for abnormal Pap tests. Management of the ASCUS Pap test was also recorded. Data was entered into a relational database and analyzed with the use of a T-test, Chi-square test and Fisher's exact test.

Results

During the 1992 study period, 7,659 Pap tests were performed by Group A and read by Laboratory A, with 7,639 Pap tests performed by Group B and read by Laboratory B. Of 7,659 Pap tests read by Laboratory A, 382 (5%) were reported as ASCUS. Of 7,639 Pap tests read by Laboratory B, 144 (2%) were reported as ASCUS. Of the 382 patients with ASCUS in Group A, 120 (30%) underwent colposcopy, compared with 65 (45%) of the 144 patients with ASCUS in Group B (Chi-square test, $P = 0.01$). (See table 1.)

Table 2 illustrates an average age, average gravidity, history of previous abnormal Pap smears and previous therapy, categorized by group of practice and whether or not colposcopy was performed. There is no statistical difference in age, gravidity or history of abnormal Pap test when patients in Group A are compared to patients in Group B. When previous therapy for abnormal Pap smear was compared, 88 (23%) of 382 patients in Group A had previously received therapy and 49 (34%) of 144 patients in Group B (Chi-square test, $P = 0.01$) had previously been treated for abnormal Pap tests.

The biopsy results of those patients undergoing colposcopy are presented in Table 3. Detection of high-grade lesions as defined by positive endocervical curettage, CIN II, CIN III, or carcinoma was compared between groups. Six (5%) of 120 patients were found to have high-grade lesions in Group A, and 15 (23%) of 65 patients in Group B (Fisher's exact test, $P = 0.04$).

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TABLE 1.
GROUP/LABORATORY COMPARISON

	Group A	Group B
Total Paps	7659	7639
Total ASCUS (%)	382 (5%)	144 (2%)
Therapy		
Observation	262 (69%)	79 (55%)
Colposcopy	120 (31%)	65 (45%)

ASCUS = Atypical squamous cells of undetermined significance.

Discussion

The current review has answered some, but not all, of our initial questions. The frequency of ASCUS Pap results in two private gynecology practices ranges from 2% to 5%. The incidence of high-grade cervical lesions ranged from 5% to 23% in those patients evaluated by colposcopy. Observation or repeat Pap test was the most common management option chosen by this group of gynecologists, 69% and 55% for Group A and B respectively. Care must be taken to avoid over-interpretation of the data. The retrospective nature of the study, the difference in incidence of previous abnormal Pap test therapy and incidence of colposcopy between the two groups makes generalizations hazardous. Since this review study, a report from a National Cancer Institute-sponsored workshop was published, stating that in most populations, the rate of ASCUS should be no more than 5%; alternatively, the ASCUS rate may be two to three times the laboratory's squamous intraepithelial lesion (SIL) rate.⁴ Several management protocols were offered for ASCUS, including the option of repeat smears every four to six months, followed by colposcopy if the patient has a second ASCUS report within two years. These guidelines were termed interim, being based on empiric data and not on published results of controlled prospective studies. A survey of cytopathology laboratories in the College of

TABLE 3.
COLPOSCOPY RESULTS

Biopsy Results	Group A (120)	Group B (65)
ECC (+), Cx Bx (-)	1	4
ECC (-), No Cx Bx	9	1
ECC (+), No Cx Bx	0	2
ECC Insuff., No Cx Bx	0	1
Neg. Biopsies	8	9
Repair	5	0
Sq. Metaplasia	43	4
Inflammation	31	1
Cervicitis	1	0
HPV/Condyloma	0	1
CIN I / HPV	17	31
CIN II / HPV	2	6
CIN III / HPV	2	3
Carcinoma	1	0

American Pathologists Interlaboratory PAP Program found a median ASCUS rate of 2.9%, with 10% of laboratories reporting rates of 9.0% or more; the corresponding median SIL rate was 2.0%, with a median ASCUS:SIL ratio of 1.3.³

As a result of our initial review and the lack of prospective data on ASCUS evaluation, we have developed a prospective study utilizing the same two groups to perform colposcopy on all women with ASCUS Pap results who have not had an abnormal Pap test in two years.

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TABLE 2. COMPARISON OF COLPOSCOPY VS. OBSERVATION

	Group A		Group B	
	Colposcopy (120)	Observe (262)	Colposcopy (65)	Observe (79)
Avg. Age	36	35	35	34
(Range)	(16-63)	(17-77)	(17-69)	(17-76)
Avg. Gravidity	2	2	2	2
(Range)	(0-8)	(0-10)	(0-10)	(0-8)
Previous Therapy	22	66	21	28
No Prev. Therapy	98	196	44	51
Previous Abn. Pap	108	103	30	39
No Prev. Abn. Pap	12	159	35	40

Ornithine Transcarbamylase Deficiency: Case Report and Review

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Five well documented diseases, each with considerable genetic and phenotypic variability, relate to defects in the biosynthesis of the urea cycle enzymes. Four of these five diseases, deficiencies of carbamyl phosphate synthetase (CPSD), ornithine transcarbamylase (OTCD), argininosuccinate acid synthetase (ASD) and argininosuccinate lyase deficiency (ALD), are characterized by signs and symptoms induced by accumulation of precursors of urea, principally ammonia and glutamine.¹ The most dramatic clinical presentations of these four diseases occur in full-term infants with no obstetric risk factors who appear normal for 24 to 48 hours and then develop progressive lethargy, respiratory problems and neurologic dysfunction related to high plasma ammonia levels. An encephalopathy that is characterized by brain edema and swollen astrocytes ensues. Although the cause of cell swelling is unclear, it has been attributed to intragial accumulation of glutamine resulting in osmotic shifts of water into the cell. These four diseases also may present later in infancy, childhood and adulthood as episodic mental status changes (lethargy, behavioral abnormalities).

Case Report

A full-term white male was born to a 23-year-old primigravida by normal labor and spontaneous vaginal delivery. The infant had Apgar scores of 8 at one minute and 9 at 5 minutes. Initially his progress was unremarkable, and he nursed very well. At 24 hours of age, he showed transient temperature instability but no other signs or symptoms.

On the day of dismissal from the hospital, the infant was noted to be lethargic and no longer nursing well. Lethargy progressed, and the patient developed tachypnea. The patient was hospitalized, and a septic work-up was initiated with antibiotic therapy after the collection of speci-

mens for complete blood count, blood cultures, urine culture and cerebrospinal fluid culture.

The complete blood count, serum electrolytes and preliminary cerebrospinal fluid studies were unremarkable. Because of the history of progressive lethargy without evidence of sepsis, metabolic encephalopathy secondary to inborn error of metabolism was considered. Inborn metabolic disease work-up, including plasma amino acid, ammonia (NH₃), urine for orotic acid and urine organic and amino acid screens were done and genetic consultation was obtained. CT scan of the head was normal.

Initial serum ammonia was elevated at 740; $\mu\text{mol/L}$ (normal range 9-33) arterial sampling revealed pH = 7.47; pCO₂ = 31; HCO₃ = 22.6; BE = 0.6; BUN = 2; creatinine = 1.1 and normal serum glucose. With these findings (elevated ammonia, alkalosis, normal serum glucose), urea cycle enzyme deficiency was suspected.

Mechanical ventilation was initiated, and to initiate peritoneal dialysis a peritoneal catheter was placed. A central line was also placed to infuse glucose solution in order to minimize catabolism. Despite initiation of peritoneal dialysis, NH₃ levels continued to rise. He developed metabolic acidosis and poor tissue perfusion. All available therapeutic maneuvers failed, and the NH₃ increased to a level of 1461 $\mu\text{mol/L}$. His clinical condition continued to deteriorate. Because of poor response to the interventions, he was transferred to another facility for hemodialysis. He died a short time after arrival.

Because of the rapid and overwhelming nature of the disease process, ornithine transcarbamylase (OTC) deficiency was suspected. Plasma amino acid levels prior to the patient's death and post-mortem liver biopsy for enzyme assay were obtained. Both studies confirmed OTC activity in liver tissue specimens was absent and DNA analysis revealed a deletion in exon 6 at codon 199 of the OTC gene.

Discussion

Clinical Aspects. Ammonia is highly toxic to the brain, where it may interfere with energy pro-

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duction and the normal metabolism of neurotransmitters. Plasma levels as low as 100-200 $\mu\text{mol/L}$ are usually associated with symptoms of lethargy and vomiting, whereas higher levels can result in diffuse brain edema, coma and death. Ammonia is dissolved in body fluids in two forms, ionized (NH_4) and nonionized (NH_3). The nonionized form is more diffusible and is, therefore, more toxic.

Newborns with acute neonatal hyperammonemia caused by OTC deficiency are typically males. Rarely, a heterozygous female may have an acute neonatal presentation. These babies appear normal at birth. Subsequently early symptoms occur, including irritability, poor feeding, vomiting, lethargy, hypotonia, respiratory distress, seizures and coma. Death will invariably occur unless hyperammonemia is diagnosed and immediate intervention to decrease ammonia is undertaken. Plasma ammonia levels are usually extremely high and may approach 2,000 $\mu\text{mol/L}$. The blood urea nitrogen level is usually low, and unless hypoperfusion or shock occurs, the patient's blood gas analysis shows a respiratory alkalosis caused by hyperventilation stimulated by ammonia's effects on the brain.

A substantial number of patients with OTC deficiency present later in life, even in adulthood, with a clinical picture resembling Reye's syndrome, behavioral changes or seizures associated with hyperammonemia. These patients are males with relatively "mild" mutations or heterozygous females whose X chromosome inactivation occurred in an unfavorable manner.

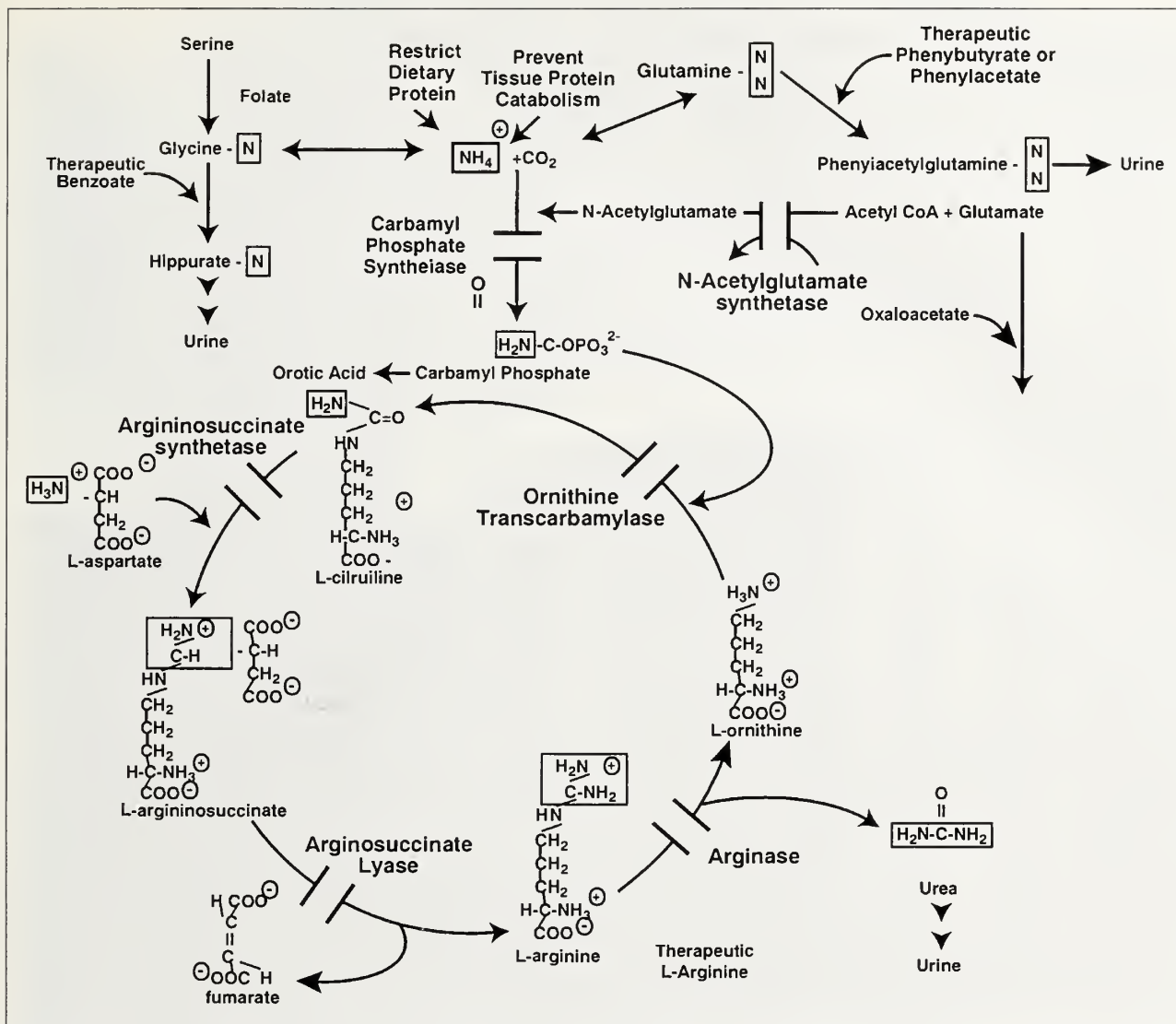
The variable clinical picture (from normal to severely affected) in females heterozygous for OTC deficiency is explained by random inactivation of one of the OTC genes. Females who are heterozygous for OTC deficiency show a mosaic pattern in the liver consisting of cells with normal OTC and cells with deficient OTC function. Only about 15% to 20% of females with OTC deficiency show clinical symptoms, suggesting that most of them have sufficient residual OTC activity to prevent hyperammonemia. All late-onset patients have partial enzyme deficiencies. The past medical history of these patients usually reveals protein intolerance, self-restriction of protein intake, severe vomiting, lethargy during intercurrent viral illnesses, Reye's syndrome-like episodes, developmental delay, and seizures. Clinical symptoms could be precipitated by catabolic stress, infections, high protein intake and possibly dehydration. Treatment with valproic acid for a seizure

disorder may unveil a previously undiagnosed urea cycle defect by precipitating an attack of hyperammonemia in a patient caused by the toxicity of this drug to the mitochondria. Similarly, exposure to insect repellent was reported to precipitate an attack in a female heterozygous for OTC deficiency.

Biochemical Aspects. A tentative diagnosis of OTC can frequently be established even before results of enzyme analysis are available. Quantitative plasma amino acid determination shows high glutamine and alanine levels, reflecting hyperammonemia and associated absent or very low level of citrulline. Orotic acid and other pyrimidines such as orotidine, uridine and uracil are elevated in the urine. The mechanism for orotic aciduria and pyrimidinuria in this disorder is probably the shunting of unmetabolized mitochondrial carbamyl phosphate into the pyrimidine synthesis pathway, augmented by excess aspartate required for de novo synthesis of pyrimidines (figure 1). The excretion of orotic acid and its derivatives by OTC-deficient patients can be exploited for diagnostic purposes in males and females and for determination of OTC carrier status in females.

The diagnosis of OTC deficiency can be established by enzyme analysis of liver or intestinal tissue. All patients with acute neonatal hyperammonemia have no detectable OTC activity in their liver, whereas patients with onset of clinical symptoms after one month of age have activity in the range of 0% to 30% of normal. Males with partial OTC deficiency have reduced or undetectable OTC protein in their liver, as shown by western blot analysis. This finding can be explained either by the presence of deletions or mutations, which cause aberrant mRNA transcription and faulty protein synthesis, or by point mutations resulting in amino acid substitutions affecting the stability of the OTC protein or premature termination of OTC translation.

Therapy. Acute hyperammonemia is a medical emergency for which immediate measures should be taken to reduce ammonia levels rapidly in order to minimize permanent brain damage. Figure 1 shows strategies for treatment of newborns with acute hyperammonemia. Current therapy consists of dietary and pharmacologic manipulation. The patient's protein intake is severely restricted and citrulline is supplemented in order to avoid arginine depletion. In addition, sodium benzoate and sodium phenylacetate or sodium phenylbutyrate are used. These drugs eliminate ammonia by alternative liver enzyme pathways: benzoate is con-



Urea cycle disorders and therapeutic interventions.

jugated to glycine to form hippuric acid, and phenylacetate is conjugated to glutamine as phenylacetylglutamate.

Hemodialysis is the most effective measure for rapid elimination of ammonia. Exchange transfusions are not efficient in reducing ammonia levels. Dialysis should be instituted if brain edema or severe central nervous system dysfunction is present. Markedly elevated blood ammonia level ($> 300 \mu\text{mol/L}$) is also an indication for dialysis.

Long-term management of these patients is based on total protein intake restriction, supplementation of essential amino acids as part of the protein intake, and alternative ammonia elimination pathway therapy with sodium benzoate and sodium phenylacetate or with sodium phenylbutyrate alone. Recurrent episodes of hyperammon-

nemia are very common among males and severely affected females.

The outcome of patients with OTC deficiency depends on the severity of the enzyme deficiency and on the degree and number of hyperammonemic attacks. Mental retardation of variable degrees is the rule in males with complete deficiency of OTC. Prospectively treated babies (siblings of affected children) do better than those treated after onset of symptoms, but their outcome is guarded. Currently, prospective therapy in the newborn period followed by early liver transplantation offers the best chance of favorable outcome.

Future prospects for therapy of OTC deficiency involve gene transfer to the deficient liver, mediated by viral vectors. A few animal studies have

been published where liver cells were transduced with normal genes.

Another suggested approach to gene therapy, for acute management, is to use an OTC-containing plasmid coated by a specific protein recognized and incorporated into liver cells. Expression of the incorporated gene occurs within a few hours but is of short duration.

OTC Gene Structure. The structural gene encoding for OTC has been mapped to the short arm of the X chromosome on band Xp21.1, proximal to the Duchenne-Becker muscular gene.² Other genes in proximity are those for retinitis pigmentosa, glycerol kinase and Norrie disease. Large deletions in this area of the X chromosome could result in contiguous gene syndromes with clinical presentations of the diseases associated with the deleted genes.

The OTC gene has been cloned and sequenced. It spans 85 kb and contains 10 exons and 9 introns.³

The messenger RNA transcribed from the OTC gene contains 1062 translatable bases, encoding the synthesis of a precursor OTC protein with 354 amino acids and a molecular weight of 40,000 daltons. The functional enzyme is a homotrimer located in the mitochondrial matrix attached to the inner mitochondrial membrane. The OTC gene is expressed mainly in the liver and intestinal mucosa.

Carrier Testing and Prenatal Diagnosis. Four

different restriction fragment length polymorphisms (RFLPs) have been identified at the human OTC locus by using various restriction enzymes.⁴ This finding makes prenatal diagnosis possible for known carriers who have an affected child from whom DNA is available. However, about one third of male patients with OTC deficiency result from new mutations with no positive family history.⁵ Here, unless their mother's carrier status is established via the allopurinol test, in-depth pedigree analysis, or DNA studies, RFLP linkage is not possible. When maternal carrier status can be conclusively assigned, DNA-based antenatal testing is almost 100% accurate.

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Farewell and Thank You, KMS

Dear Readers:

With this issue, I conclude eight-plus years of full-time work for KANSAS MEDICINE. For a while, at least, I will continue to edit the journal as a freelancer. The reason for the change is that I have joined my husband in a new business.

When I began working as a part-time proofreader in high school, metal headline type was still being set by hand, letter by letter. By the '70s, computer systems produced type photographically, but editors still had to send manuscripts out for typesetting. Then came a series of technological advancements in the '80s that led to the present generation of desktop publishing, the means by which we all become typesetters merely by sitting down at our personal computers.

From this dizzying sphere of advancing technology, I now step back in time as my husband

and I open a Native American arts and crafts gallery. The wares in our shop are made by artisans whose techniques in some cases predate even the potter's wheel. The patterns may become more sophisticated, but — so far — the techniques remain decidedly low-tech. Perhaps their simplicity is part of the reason why these crafts appeal so strongly to us today.

But we are not completely retreating into the past. To acquire handcrafts for our gallery, Jim and I travel the byways of the southwest in our air-conditioned car, with our cellular phone. We advertise the store on cable television, and an electronic alarm system guards the wares in our shop. In our new life, the genius of Native American tradition meets the wizardry of Anglo high-tech inventiveness — strange, but compatible, bedfellows.

I appreciate the experience of working with you at KMS, and I hope to see you again from time to time. Until then, good-bye.

Susan Ward, *Managing Editor*

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FOR A DOCTOR TO OPERATE.



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Would I Rather Be Doing Anything Else?: Kansas Women in Medicine

SUSAN WARD*

It is with great pride that I see a special feature in KANSAS MEDICINE dedicated to female physicians. Kansas' women physicians have a long history of contributions and involvement with Kansas medicine. They have held positions of great respect throughout the years. There have been some obstacles to overcome, but I feel that some of the barriers in Kansas have been less than in other parts of the country. Part of this, I feel, is due to the attitudes of Kansas' male physicians who, for the most part, have welcomed all professionals, regardless of personal characteristics such as gender and race, as equal contributors on the medical team.

If there is any barrier to women physicians now, it seems to be convincing bright young women that they can have a future in the medical world and enjoy the rewards and personal satisfaction of productive medical careers the same as their male peers. Women do have a different perspective, and we need their contributions to provide even greater depth and variety to the profile of medicine in Kansas.

Linda D. Warren, M.D.

"Everyone knows" female physicians have a tougher time than their male counterparts. Discouraged from attending medical school by paternalistic admissions officers, ridiculed and harassed by their male classmates and professors, scorned by male patients and colleagues, they are frustrated at work and always on the run at home, where they are terrible mothers because they are too busy to find time for their children. Such complaints are what we expected to hear when interviewing several Kansas female physicians for this story, but the accounts we heard were quite different. While all the women we interviewed agreed that female physicians have different experiences from those of their male counterparts, none felt that life was very much harder or that they were treated unfairly. Some even felt being a female physician has its advantages.

Coping with Being Different

"I'm different than my male partners, and I think differently," explained Debra Doubek, M.D., of Manhattan. "I've been in practice with five men for three years now, and I'm the only woman in

this group. I might spend a little more time with patients and talk more with patients, and that's how I think that we're different." Dr. Doubek has read books on the subject of male/female differences in which the authors observe that, in general, men are more comfortable with public speaking, while women tend to talk in small groups or one-on-one to build rapport with one another. The differences, Dr. Doubek said, are not troublesome. "The more I understand it, the better I can accept it and acknowledge it, but it's never been a problem.

"When I came to this group five years ago," she said, "I feel they were unprepared for the polarization that would ensue in our practice. Women patients, when they discovered a woman doctor in the practice, wanted to go to her. That could have been a problem, so we had to work it out amongst us: 'If Dr. Doubek sees only women, she's not doing family practice.' We needed to keep the patients together, the families together as a unit. It presented new issues that had to be addressed."

Dr. Doubek has not had problems communicating with her male patients because "I bring it up. I ask them if they feel comfortable seeing me.

*Managing Editor

We talk about it, and we work it out. Most of them feel comfortable with me, but some of them say, 'You're not doing my rectal exam. I'll go to your partners.' I'd say 70 to 80 percent of the men feel comfortable letting me do their health care."

Katherine Pennington, M.D., a retired physician in Wichita, says, "I really don't see a lot of difference [between male and female physicians]. Fortunately, I've been in places where there always were some women doctors, usually good ones. In Wichita, when I started, Dr. Frances Schiltz had been here for about 20 years. So I had almost all of my studies and also my work in an atmosphere where female physicians had been just a part of the community, of the climate there. So it hasn't really been a problem."

Susan Pingleton, M.D., on the faculty at the University of Kansas School of Medicine, Kansas City, found several ways in which male and female physicians are alike. "I see all kinds of practices now versus when I started 20 years ago, and I see the variety and the options of different kinds of lifestyles and medical practices, probably affecting men and women both more than they used to," she said. "Twenty-five years ago, when I started out, there weren't many options, actually, for men or women. If you wanted to be a doctor, you took care of patients in some setting and that was it. You worked a pretty hard life and pretty regular hours. Now you can decide. If you want to have a more structured life with more structured hours, you can go into this type of practice setting or that type of setting. People know what kind of practice or work situation they're getting into now, and they can control those better. And that's the same, I think, for men and women. I think women, especially if they're of a childbearing age, want to get into a more routine practice setting, but I see men doing it, too: people — men — who go into ER because they don't want to work 24 hours a day, seven days a week. They want to stay home with their kids."

We're at a point in our culture where we're affluent enough so we don't have to be out there mining the mines to get food, water and clothing on our backs. And we [physicians] know that whatever salary we get is going to be very good, so that gives us more latitude to have options. Even within the realm of surgery, people are carving out different kinds of niches — and women are doing it, too. What I'm sensing is that there is, in some ways, a blurring of 'all women do this and men do this.' "

If It's Not Harder for Women, Is It Easier?

Donna Sweet, M.D., of Wichita, says, "Very few times have I felt that [being a female physician] is any harder, and at times it may be easier in terms of patients. I don't really think I have ever faced what many people have in terms of discrimination. I have been welcomed by males and females alike within the profession and, again, have found the male physicians around me from the very beginning, medical school on, quite supportive. I can't tell you that I think there's been a great deal of difference — once I got into medical school. I got in at a time when it was more difficult getting in because you were a woman."

Dr. Sweet agrees there can be advantages to being a female physician. "At times being a woman in this profession, especially with patients, has been very helpful," she said. "It is helpful because, right or wrong (and some of my male counterparts would say it's wrong), women are sometimes perceived, especially by other women, as more empathetic, more listening-oriented, perhaps kinder, gentler. I'm not saying that we are, but I'm saying that oftentimes there is that perception. Most men, I think, view us as less threatening or more compassionate. I think sometimes women can get by as physicians being 'maternal' easier than sometimes men get by with being 'paternal.' A lot of my male counterparts will tell you that's not fair. I'm not about to say it's not unfair — but it's been helpful. They kid sometimes about the fact that we have it easier because of what one of my male counterparts says is the misconception that we're easier to get along with."

"Also, in the business I'm in," Dr. Sweet continued, "dealing with HIV and AIDS, that's very definitely a gay population and, again, I think I was less threatening as a woman than some of the men were. I was just freer to get involved in that without some of the concerns that male counterparts might have had. Early on there was sometimes a presumption on the part of the community that if you were — especially a man — involved in AIDS care, you must have a vested interest; i.e., you might be gay. So it was easier as a woman — as a nice, straight, married woman. Nobody had any concerns. I did it because I wanted to. I like taking care of sick people."

"As an internist," Dr. Sweet added, "I do a great deal of gynecology because when I started in general medicine, there were very, very few obstetric/gynecologist specialists who were women. That has improved, but there's still not enough gynecologists to do all the Pap smears

that need to be done. Early on I developed a very heavily-sided female practice because so many women wanted another woman to do that part of their health care."

Juggling Personal and Professional Life

Of managing her personal life, Dr. Sweet says, "I chose not to have children. I view my patients sometimes as all my children. I quite frankly don't know how some of my female counterparts who have children do what they do. And I have absolutely the most exceptionally supportive husband one could ever hope to have. We got married a week before I started medical school, which was in 1976, and I could not do it without him. He is my friend, my support, takes care of me in the sense of household things: banking, the business side — then in terms of any free time I have, the luxury of not having to do housework or going to the market or doing the laundry. He literally makes sure that's all taken care of. So the time we do have when I'm not working — which he says is getting more and more limited — we spend playing golf together. That's made it much easier."

Dr. Pennington did not have that luxury. "I always felt the fellows had an advantage in having a spouse who could do a lot of the routine things that I had to do for myself," she remarked. "But at the same time, I didn't have to take care of children and things like that. I never married, so that part of it I didn't have to do."

"I did have some concerns with my parents when they were elderly, and that did make some problems, but probably no more than the male doctors would have had. I couldn't always take time off to help them when I'd want to. But any doctor sometimes finds that they'd like to be in two places at one time."

One distinction Dr. Pingleton noted is in "how women see their responsibilities at home. Maybe the next generation won't be quite this way," she mused. "Or maybe it's like right-wing people say: women are intrinsically born to take care of other people. I don't know what it is, but there is a difference. [Women] just all take it on more. The work is not divided equally." To compensate for the imbalance, Dr. Pingleton has a babysitter/housekeeper/cook to assist with domestic chores.

"I clearly cannot be the kind of mother-housewife my mother was," she observed. "She'd can and bake — and there's no way I can do that. Everything gets done, and then women have work over and above that. They do it, and the

person that suffers the most is they themselves. We are the last person that we give any time to. I'm not complaining — that's just reality. When I was a new, young faculty person at a women in medicine meeting, a guy, a chairman of the department of medicine, a well recognized faculty person, got up at a luncheon and said, 'If you want to succeed in academic medicine and raise a family, you're going to get less sleep.' And he was exactly right. I'm not bitter about it, but it is a reality."

Dr. Pingleton said she tries to take summer vacations "in a bolus" of two or three weeks to stay at home with her family. At those times, she enjoys baking and gardening. She noted that she tries to recreate some of the memories of her childhood by doing things her mother did, but "I can't be her."

Dr. Doubek has found similar solutions to the problem of balancing the demands of personal and professional life. "I hire good help," she explained. "I hire a full-time nanny. I hire someone to clean my home. And my husband works part-time. That's how I manage." Her group also has found a solution to physician burnout. "In our group, we each take one day off during the week; we each work four workdays. You pay for that day you take off, but I go and do volunteer work a half day at my son's school, and I feel like I'm able to do what I need to do. It helps a lot."

On the other hand, Dr. Doubek noted that male and female physicians must be careful about social interaction. "I see how my partners interact with our [male] specialists," she said, "and I think I interact with them a little differently. I don't go out and play golf with them. I don't have lunch with them. There could be some sexual overtones. I mean, if I went out and played golf with a local orthopedist, the town would be buzzing. Or if I went out to lunch with our male ob/gyn, people would see us sitting together at that table. You just can't do that, and my partners can. I feel that I don't have as much of a personal knowledge of the specialists. That kind of carries over, because it seems that some of my partners are closer to some of our specialists. They do social things with them, and that is an advantage I don't have."

In a city the size of Wichita, Dr. Sweet said, this is not a problem. "We don't intermingle with our male counterparts. The difference is here I have female counterparts that I can intermingle with. And the socializing we do tends to be as couples. But you don't have the camaraderie with

I can remember one occasion when I was making a house call and a gentleman looked out, rather puzzled, and asked, 'My God, is that what they're sending out for doctors nowadays?'

your male counterparts that you would if they were female."

Discrimination and Sexual Harassment

KMS President Linda Warren, M.D., of Hanover, recalls being asked in her medical school admissions interview why she was not wearing a suit. (Her answer was that she had not been able to find one she could afford that looked professional. She chose a grey flannel dress instead.) What sorts of harassment or inequalities have these physicians faced during their medical school and professional careers? Again, the answers were surprising.

"I have never had problems with either of those," Dr. Doubek stated. "I never felt in medical school or training that I was treated unequal." In fact, Dr. Doubek feels being a woman has been helpful in her career. "I feel my sex has been very advantageous. Female primary care physicians are sought out. They're marketable."

Asked if she had ever experienced any sexual harassment or inequality because of her sex, Dr. Sweet responded, "No. I thought about that because that is always the question people ask and wish to know about. I don't know — maybe I haven't noticed, but certainly if I haven't noticed, it couldn't have been very difficult. I've worked hard — I will tell you that. I was very pleased when I was promoted from associate professor to full professor within the KU system in 11 years. Women in academic medicine, if you look at the statistics, do not rise through the ranks oftentimes as quickly as male counterparts. That was not the case with me. KU has been exceptionally supportive, and my dean and chairman here have been supportive. And Dr. Joe Meek, who's kind of one of my mentors and one of the people I give a great deal of credit to for supporting me, for getting me

into positions where I could do things that made me promotable and tenurable — I have had the luxury of that kind of mentoring that some women don't get. Because it takes someone like a Dr. Joe Meek to help you know what to do and how to do it, what's going to be necessary to move forward.

"There have been some female role models: Dr. Frances Schiltz, the first female internist in Wichita. I had the opportunity to get to know her at the end of her life — she lived to be over 90. Knowing her, seeing what her life had been like, gives you someone to emulate. She was certainly far from a traditional woman; she broke ground, in terms of being a female physician in this part of the world at a time when it had to have been absolutely horrendously difficult to be the only woman in the medical society and on the hospital staff. And yet she made a lot of difference and got a lot done. A lot of my goals and what I'd like to be like I attribute to her."

Questioned about sexual harassment or job inequalities related to sex, Dr. Pennington replied, "Nothing very significant. Of course, in our school [KU School of Medicine], we had an unusually congenial class. We had eight women in our class, which was quite unusual then. Oh, we'd get some teasing, but never actually had any real harassment."

Asked if being a woman had been either a help or a liability, Dr. Pennington replied, "In many ways, it's been an advantage, partly because I'm in pediatrics, and I find many mothers particularly like the idea of having a woman seeing their children. There is sometimes, I think, curiosity as much as resentment to find that there are women doctors — particularly when I first started in practice.

"I'd take calls for the exchange answering service here. That was before we had walk-in services, and I can remember one occasion when I was making a house call and a gentleman looked out, rather puzzled, and asked, 'My God, is that what they're sending out for doctors nowadays?' It's usually just a matter of people not being too familiar with it. I'm certain there was at least one occasion when a mother said that she was going to have to change to another doctor because her husband didn't like the idea of the children having a female doctor. But those are pretty rare."

Dr. Pennington also felt her colleagues had treated her with equal respect. "I think staying in your home territory is very helpful. Many of my class members came from Wichita, and I had

known them. It's a rather friendly atmosphere there. I had one or two professors that sometimes would make a little snide remark, but most of the professors were quite accustomed to having women in class.

"I did my internship in Minnesota," she continued, "and they had some outstanding women on the faculty there. Then I took a fellowship at Johns Hopkins under [a woman]. When you've got a woman chief, you feel very much in favor — in fact, the fellas used to think we got favored, which was a nice situation. Maybe it's just that people talk about it more, but I feel in some ways there's more discrimination now than there was 40 years ago."

Dr. Pennington, as a solo practitioner, had no problems with pay inequities. She noted that the medical school in Wichita was eager to add women to the faculty, and she had no difficulty with promotions.

She is pleased that so many women now choose careers in medicine, but "every once in a while, I'm disappointed at the attitude of resentment that some of the students seem to feel at not being treated fairly, and they're a little over-aggressive. I am surprised at the amount of prejudice some of them seem to feel. Whether the situation's changed that much, or whether the whole world has changed so women expect a lot more — I suspect the latter — I think [women] feel that they're not getting full advantage. Some of them seem to have a chip on their shoulder."

Dr. Susan Pingleton also expressed pleasure at the increasing numbers of women in medicine. "I think that will be a great modulating effect," she said. She felt her sex is both an advantage and a disadvantage. "In anybody who's trained, there's this whole pool of people who've done all that, who've met all the criteria. Now, how do you pick from those people to advance in something? I'm talking about equal qualifications. There are clearly times I've been asked to do something because I'm a woman. And there are clearly times I haven't been asked because I'm a woman. It absolutely works out both ways. Affirmative action means, or can mean, equally qualified people and then trying to increase a certain minority representation that wouldn't otherwise have gotten recognized, and I think white professional women were the greatest beneficiaries from that sort of thought. But there have clearly been things I didn't get because I was a woman — absolutely, even though I was equally qualified. And that's just the way it is.

"My sense is my rising through the academic ranks has been all because of what I did or didn't do. But what I'm talking about is on a national level, there are a number of things that happen in a certain specialty, and whether you get asked to do something within a professional organization, I think, has been influenced. But I really don't think that I have been adversely affected; in other aspects of my professional life, but not my job per se.

"I think we're luckier in medicine, particularly as far as compensation. I think we're probably more equal than a lot of women in other professions.

"I cannot say that I was ever overtly discriminated against. Now, that's different from being part of the 'boys' club', though. I am one of the few women involved in a national organization. It's different there. It's clearly different. It's not somebody trying to exclude me, but they're so used to only having men around. You're just not one of the boys. For a long time that bothered me, and then I decided I don't want to be one of the boys in that sense.

"But all in all it's very encouraging. I was in medical school 25 years ago. There were 130 of us total, and I was one of six women. None of us missed any classes, because if you did you were so obvious. I never felt I was not accepted, but when I walked into the student lounge, chances are the whole room was male except me. Now they have 25, 30 percent women. Women going through today . . . more women, more support. That's really great."

Women and Organized Medicine

"It helps give me an identity," says Dr. Doubek of her organized medicine affiliation. "It helps me mingle with people who have things in common with myself. We're all in this together; we're all fighting the same issues. And it buoys my spirit when I go to the meetings and see people grappling with the same things I am in my own little world." Asked what needs are not being met by the organizations (including KMS) to which she belongs, Dr. Doubek replied, "I can't really think of anything. If I have a need that's unmet, I'm a go-getter and I can usually find a way to solve that problem."

Dr. Pennington, who was elected president of the Medical Society of Sedgwick County in 1985, recalled, "Dr. Schiltz always felt bitter because she should have been elected president of the medical society sometime, and that never hap-

pened. But she was delighted when about 30 years later I did get to be that first female president."

Dr. Pennington became involved with organized medicine because "I just sort of expected to. It seemed to me that you really should belong to your professional organization. So many things need to be done." Dr. Pennington was KMS Constitutional Secretary in 1986-88. She was the first woman president of the medical staff at St. Joseph's Hospital, Wichita, and became active in civic causes related to medicine, such as the March of Dimes and the immunization task force.

"Certainly I believe there is a place for organized medicine," said Dr. Sweet, who is a member of the Sedgwick County society, the KMS and the AMA. "Where I have gotten *involved*, though, as opposed to being a member, is through the American College of Physicians. I am currently the Governor-Elect of the Kansas ACP. This is the first time there's been a woman in that position, which means I have a national role in the sense that the college is run by the board of governors. So for four years, I will have a national role representing Kansas. This is organized medicine trying to weigh in in favor of what's good for patients and physicians in a very difficult economic time."

Dr. Sweet observed that her work has helped familiarize her with colleagues' attitudes all around the state. "I attribute a large part of my ability to know the state as a practicing internist to what I do with HIV and AIDS," she said. "I spent a lot of time doing the circuit, stumping the state talking about AIDS, which means I'm probably one of the few Kansas physicians who can tell you exactly where Satanta, Kansas is — and every other town of under 2,000!"

Dr. Sweet hopes organized medicine will offer women "more opportunity for networking." Referring to Kansas in particular, she added, "The more rural you are, the more isolated you are and the less likely to have access to other females in similar situations, so make opportunities where people in that situation can get to know each other. Other than that, good educational, organizational and lobbying programs are good whether you're male or female."

"Those of us who are female physicians now, within our communities, our schools, our organizations, need to be the mentors for our younger women," Dr. Sweet said. "A lot of women

haven't been lucky enough to have someone that's really taken them under their wing. That's not to say a man couldn't do it, but there's enough [female physicians] out there now with some experience that we need to get into a more traditional mode like men have done for so many years, helping them through the system, helping them know what you need to do to move forward in whatever arena you choose to do it in. We have to make the time to be active in organized medicine, in our societies if we really want to make a difference."

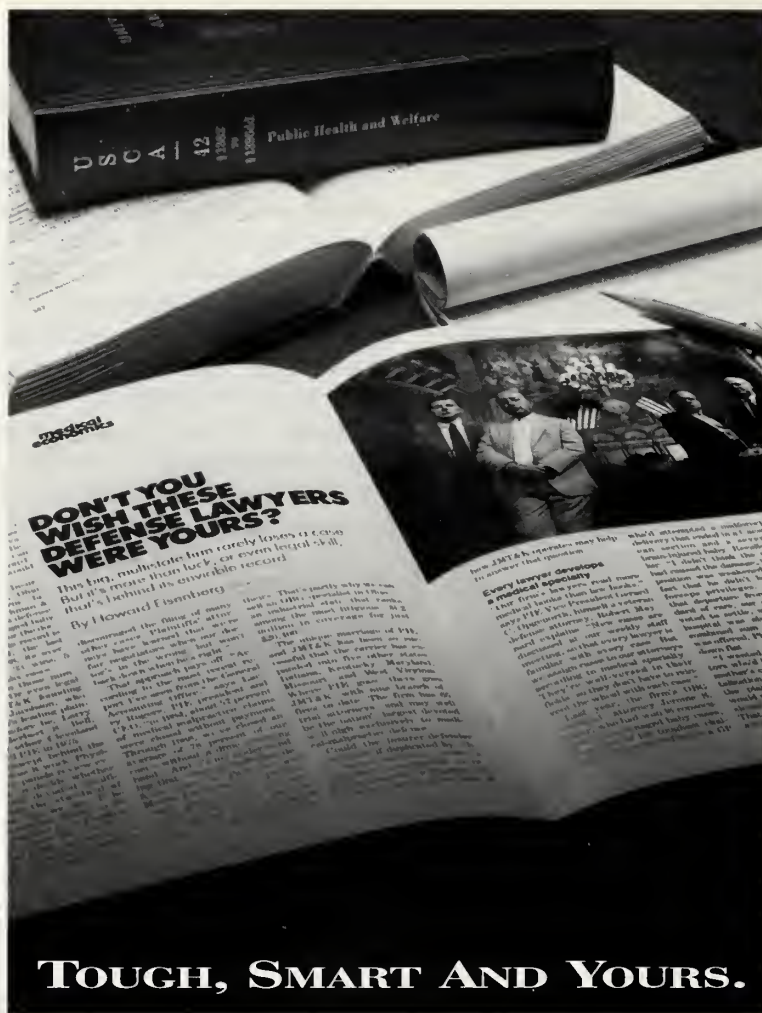
Dr. Pennington feels one way medical organizations such as KMS can benefit women in medicine is to organize events for them, such as a breakfast at the annual meeting for female physicians and female medical students.

Dr. Pingleton feels those in academic medicine may best appreciate the value of membership in organized medicine. "I think it's probably a little more natural than if you're in private practice. I mean, it is a sign of academic development. So there wasn't ever much thought of not doing it." She feels medical organizations offer individuals an opportunity to "become involved at a lot of different levels."

Few Complaints

This writer was struck by the positive comments made by all the women interviewed. Though they represented several age groups and types of practice, none seemed to have been troubled by the problems one expects to hear female physicians discuss. Perhaps, as Dr. Pennington said, bonds are formed during medical school, and sometimes even earlier, that are maintained in later years. Or it may be that these women, all leading successful, well balanced lives, approached medical school and their practice years with open minds, not looking for gender-related problems and therefore not finding them.

Perhaps Dr. Doubek best expressed what the interviewees seemed to feel about their lives as women in medicine: "Oh, I do [enjoy what I do]. I get tired, and I get down in the dumps sometimes when I'm sleep-deprived and feel overworked and underpaid, but at the end of the day I think, 'Would I rather be doing anything else?' and I always think how happy I am and I feel very fortunate for what I'm able to do and the lives I'm able to interact with and influence."



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Geriatric Grand Rounds: Hearing Impairment and Functional Independence

DANIEL L. SWAGERTY JR., M.D.,* *Kansas City*

An 80-year-old man was referred to the clinic because of increasing social withdrawal and cognitive decline. The referring physician thought he might be demented or depressed. The patient's daughter stated that he didn't seem to understand what she told him and didn't pay any attention to other members of the family. The patient admitted to feelings of nervousness and low mood, especially in social situations and while watching television. He had markedly reduced his involvement in both activities over the past year. On examination, he appeared well nourished and pleasant. Vital signs were normal. Both auditory canals were impacted with cerumen. The cerumen was carefully removed by irrigation. The tympanic membranes were unremarkable bilaterally. All other physical findings were normal. His score on the Mini-Mental State Exam was 26/30 with losses on recall, repetition and ability to follow a three-step command. Radiometry using a hand-held audioscope revealed high-tone sensorineural hearing loss bilaterally.

Discussion

This patient had presbycusis, a disorder resulting from age-related degenerative changes in the peripheral and central auditory nervous systems. It is characterized by a gradual onset of bilateral and symmetric high-tone sensorineural hearing loss and an impaired ability to repeat or write words that are heard. Presbycusis is the most common form of hearing loss among older adults. The etiology is often multifactorial. Noise, diet, medication, disease and degenerative changes from normal aging are all etiologies. Older adults with presbycusis are unable to understand speech, particularly when background noise is present. The

typical complaint is, "I can hear people speaking, but I can't make out the words." This is the result of the loss of hearing (pure-tone thresholds greater than 25 dBHL) in the mid to high frequencies (1,000 to 8,000 Hz). These frequencies carry the information most critical for speech understanding, such as consonant sounds, plurals and word endings. Hearing in the low frequencies (250 to 1,000 Hz) enables us to hear background noise. Thus, background noise tends to drown out the high-frequency sounds that are so important for communication.

Hearing impairment is the third most prevalent chronic condition in community-dwelling older persons, exceeded only by arthritis and hypertension. Although hearing impairment has been reported to occur in 35% of persons between the ages of 65 and 74 years and 50% of persons older than 75 years, it is often undetected and untreated. Functional losses associated with hearing impairment are not uncommonly attributed to dementia, depression or old age. Hearing status should thus be considered when older adults are assessed for deterioration in function. This case demonstrates how hearing loss can be misdiagnosed as cognitive decline or an affective disturbance.

Three Types of Hearing Loss

Although changes in hearing are not a universal aspect of aging, they are very common and can be put into three classifications. First, conductive hearing loss results from disorders that impede normal transmission of sound waves through the external canal and tympanic membrane or interfere with amplification by the ossicles. One important, easily remedied cause of conductive hearing loss is cerumen impaction in the external canal. This is found in 30% of elderly persons. Cerumen may be a primary or contributing cause of hearing loss, producing decrements of as much as 40 dB. Cerumen undoubtedly contributed to this patient's hearing loss.

Secondly, sensorineural hearing loss can occur

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from lesions of hair cells in the cochlea and neurons in the auditory branch of the eighth cranial nerve. Sensorineural hearing loss, other than presbycusis, may be due to Menière's disease or drugs, particularly aminoglycoside antibiotics and loop diuretics.

Finally, disturbances of the central auditory nervous system can cause hearing loss. A mixed hearing loss can also occur when several of these mechanisms are present concurrently.

Evaluation of Hearing Loss

Evaluation in the elderly begins by specifically asking all older adults and their families about difficulties related to hearing. Many older patients may not volunteer this information spontaneously or may attribute any difficulty to normal aging. It is common for the functional impact of hearing loss to be underestimated until significant psychosocial consequences have already occurred. Physicians should always screen for any associated depression, cognitive decline, reduction in physical function, or social dysfunction when hearing impairment is present.

The most reliable screening test to assess hearing is the audiogram. This test can be conducted using an audioscope or desktop model. The development of the hand-held audioscope has greatly facilitated the bedside and office screening of older persons. Testing is usually performed using tones of selected frequencies and decibel levels. The failure to hear any frequency other than 4,000 Hz has been suggested as a threshold for referral for more extensive testing.

Treatment

Most older hearing-impaired adults can benefit from amplification of sound via a hearing aid and/or an assistance listening device. Well selected amplification can improve the efficiency of communication, even in severe sensorineural hearing loss. Significant improvement in social, emotional and cognitive function can also occur with improved hearing.

Binaural hearing amplification is generally desirable. It best preserves directional clues that help in localizing sound and enhances speech understanding. The patient in this case received bilateral hearing aids and found them quite effective. If only one hearing aid is to be used, the choice of amplifying the better or poorer ear depends upon whether the poor ear has internally generated distortion. If it does, amplification is likely to detract from, rather than improve, hearing.

Aural rehabilitation should occur with any hearing aid purchase. The older adult and the family are counseled regarding the benefits and limitations of hearing aids. Suggestions for improving communication between the hearing-impaired and others are also addressed. Such a rehabilitation program was provided to the patient and his family. They felt it contributed to restoring lost function.

Other assistive listening devices can be used as adjuncts to, or in place of, hearing aids. All have one feature in common: the microphone is moved closer to the sound source and therefore delivers a louder signal that is free of surrounding noise. Hard-wire connection systems, costing less than \$100, represent the least expensive method. Wireless systems, which are more expensive, transmit sound via FM radio waves or infrared light to a receiver worn by the listener.

The telephone company offers several other assistive devices for deaf or hearing-impaired persons, usually at no additional charge if a physician has certified the individual as hearing-impaired. These include amplifiers, louder bells and light signals. The telecommunication device for the deaf (TDD) service, which links a typewriter source and a destination over the telephone line, is also available.

Summary

Hearing loss is a commonly encountered impairment in the elderly. It can profoundly affect physical, psychosocial and cognitive function. In addition to the actual hearing loss, other factors contribute to the hearing handicap experienced by older persons. These include difficulty in understanding speech in noisy situations, difficulty in supplementing hearing with visual information, and the slowing of cognitive and psychologic processes. Many forms of amplification are available and can be very useful in reversing much of the functional impairment associated with hearing loss. A comprehensive audiological assessment should be recommended before selecting the type of hearing aid or assistive listening device. Such a referral also affords an opportunity for more extensive aural rehabilitation.

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(Continued on page 151.)

Teenage Pregnancies in Kansas, 1980-1993

Increasingly, attention in our state and across the nation is being focused on the consequences of teen childbearing. Teenage pregnancy is far more prevalent in the United States than in other developed western countries; the U.S. has one of the highest teen pregnancy rates in the world. The health and social consequences are serious:

- Pregnant teenagers often lack adequate prenatal care and nutrition, which can result in low birth weight, infant death, birth defects and many serious illnesses.

- Teen mothers are often forced to drop out of school and obtain less education than their peers who postpone childbearing.

- Many teen mothers have difficulty getting jobs, earn lower wages and are more likely to spend some of their lives in poverty.

- Teen mothers are more likely than older mothers to need public assistance.

- Children of teenage mothers are more likely themselves to become teen parents. They are at greater risk for abuse or neglect, lower academic achievement and social behavior problems.^{1,2}

There are major economic consequences as well. In 1988, nearly \$20 billion was spent nationally on Aid to Families with Dependent Children, food stamps and Medicaid for families that were formed when the mother was a teenager.² According to data from the Kansas Department of Social and Rehabilitation Services (SRS), 60% of all adolescents who give birth to a child in Kansas receive some sort of public assistance, and 80% of teen parents who have a second child become long-term welfare dependents.³

Teen Pregnancies in Kansas

Kansas statistics reveal that teenage females accounted for 14.6% of the pregnancies in the state in 1993. A teen pregnancy is defined as a live birth, fetal death or abortion occurring to a female under 20 years of age. Three-fourths (4,799) of the teen pregnancies in 1993 resulted

in a live birth, nearly one-fourth (1,580) in abortion and the rest in fetal death (26). Seventy-seven percent of the teen pregnancies in 1993 were to unmarried females. White teens accounted for 5,133 (80.1%) of the teen pregnancies in 1993, African American teens for 1,029 (16.1%), and Hispanic teens for 515 (8.0%). Thirty percent of the teenage females who were pregnant in 1993 had experienced at least one prior pregnancy.⁴

Of all women having their first live birth in 1993, 25.4% were teenagers. The low-birth-weight rate for teens in 1993 was 88.8 per 1,000 live births, compared to 62.3 for non-teens, making the rate for teens 42.5% higher. In 1993, 85.5% of non-teen mothers who had a live birth received prenatal care in the first trimester of pregnancy, compared to only 68.3% of teen mothers. The percentage of teens who received no prenatal care (1.8%) was more than double that for non-teens (0.8%).⁴

The good news is that the number of teenage pregnancies for Kansas residents declined 26.3% between 1980 and 1993. During 1993, there were 6,045 teenage pregnancies, compared to 8,687 in 1980. As shown in the figure, pregnancy rates for Kansas teens ages 10-19 decreased 22.3% between 1980 and 1993. The Kansas teenage pregnancy rate was 25.5% lower than the U.S. rate in 1980 and 42.9% lower in 1991.

The reduction of teen pregnancies is a critical public health goal for Kansas. The Kansas Department of Health and Environment (KDHE) has been involved in a number of activities related to teen pregnancy in the past few years. KDHE produces teen pregnancy tables that include numbers and rates for the state and individual counties. These data are available to local communities and to maternal and child health consultants to identify high-risk communities and to implement services in these communities.

Programs to Reduce Teen Pregnancies

In order to help teenagers avoid the negative outcomes of early childbearing, KDHE has incorporated teen pregnancy intervention into a number

Reported by: Karen Sommer, M.A., Office of Research and Analysis, Center for Health & Environmental Statistics, Kansas Department of Health and Environment.

of its programs. For instance, the Healthy Start home visitor provides special supportive services to pregnant or parenting adolescents. Mother and Infant (M&I) prenatal services provide more intensive assistance for the pregnant adolescent through social work, nutrition and health services. Family planning services include special counseling for adolescents regarding effective contraceptive use, relationships and involvement of family. All maternal and child health programs (M&I, Healthy Start, Family Planning and WIC) are helping teen mothers and their children deal with the serious economic, social and health effects of teen pregnancy.³

Since 1991 community-based teen pregnancy prevention projects have been funded through KDHE in four Kansas communities: Salina, Topeka, Wichita and Winfield. These communities replicated a successful South Carolina model based on the premise that people will attempt to solve their problems if they are aware of the problems and are assisted in identifying solutions. All members of the community receive educational messages related to teen pregnancy through media campaigns, workshops and teen speaker bureaus, which motivate community members to actively support healthy life choices for teens.³

As a result of special state general fund appropriations in the past few years, KDHE and SRS have been working together in developing strategies to reduce teen pregnancy and long-term welfare dependency by teen parents. This combined effort has resulted in several grants being awarded to counties and communities with high teen pregnancy rates.

A plan developed in 1995 by KDHE and SRS involves providing comprehensive case management services to Medicaid-eligible adolescents under 20 who are pregnant or have a first child. Currently, projects are funded in Douglas, Geary, Montgomery, Sedgwick and Wyandotte counties. The case manager assists the adolescent in identifying and accessing services and supports necessary to successfully accomplish an individualized plan that will help them to help themselves. These services continue until the adolescent achieves the goals set out in the case management plan or leaves the program at age 21.³

In 1994 teen pregnancy peer education/counseling projects were funded in 3 counties: Finney,

Sedgwick and Seward. These projects provide a variety of activities around tested curricula that use professional and peer educators, peer counseling, and youth/parent learning and communication opportunities.³

KDHE also funds two residential maternity homes in Lawrence and Wichita for enhanced adolescent services, including repeat pregnancy reduction. Upon leaving these programs, teens are contacted at one- and two-year intervals to assess the projects' success in assisting them in spacing future pregnancies and in achieving personal health, education and vocational goals.³

A recent report by the Kansas Adolescent Health Alliance (KAHA), addressed adolescent health issues in Kansas and included a section on teen pregnancy. The KAHA report *Adolescent Health Kansas Profile, 1995* proposed the following recommendations to address the problems of teenage pregnancy:

- Enhance and promote comprehensive school health education (life skills) for kindergarten through twelfth grade that is mandatory in all schools.

- Fund and expand community-based teen pregnancy prevention initiatives for both males and females.

- Fund and evaluate case management services to help low-income teen mothers delay a second pregnancy.

- Create a centralized, coordinated body (public/private partnership) to provide local, community-based teen pregnancy prevention programs with technical assistance, training, statewide media support, etc.

- Target at-risk youth by developing apprenticeship programs that foster success and independence.⁵

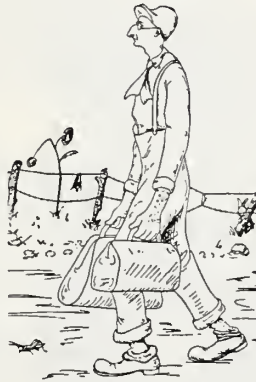
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I Study Medicine

ARTHUR E. HERTZLER, M.D.

The first order of business was to select a medical school. I chose Northwestern University, on the advice of my preceptor, because the entrance requirements were relatively high — that is to say, the equivalent of a high school course — and the medical course required attendance for three years of seven months each. The course was graded, classes being taught separately so that one advanced from year to year. Of course, all schools do so now, but Dr. Davis, the dean, got the idea first and it found practical expression in Northwestern. It was a happy choice. The faculty contained a number of medical men of the first rank in professional knowledge, coupled with high character, things essential to the making of a good teacher. Also valuable, it may be added, to keep the students in the straight and narrow way while they were attending school. Dr. Davis was a teetotaler against anything but hard work. Getting “stewed” was not the respectable thing then that it is now. If a student got drunk and Dr. Davis



found out, that was the last of Mr. Student. Of course, the doctor did not learn all that was going on. We had some students in those days from Milwaukee.

A summary of the teaching as it was offered to us is of historic interest. The modern student will compare it with his own experiences with a sense of satisfaction to himself no doubt.

All teaching, save chemistry, was done entirely by men in active practice. Our school had but two full-time men, the professor of chemistry and the janitor. Of necessity, therefore, instruction in the scientific branches was for the most part very meager. For instance, the slides of histopathology, which were prepared for us, I reckon by the janitor, rivaled in thickness and translucency a restaurant beefsteak. One advantage was that the student could not see enough to permit him to embarrass the teacher by asking any pertinent or impertinent questions. I remember well my slide of small round-celled sarcoma. It was shaped like the state of Texas and was a deep mahogany brown. I could always identify it by its shape and got a ten for doing so at examination. Not a single cell was recognizable.

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GERIATRIC GRAND ROUNDS

(Continued from page 148.)

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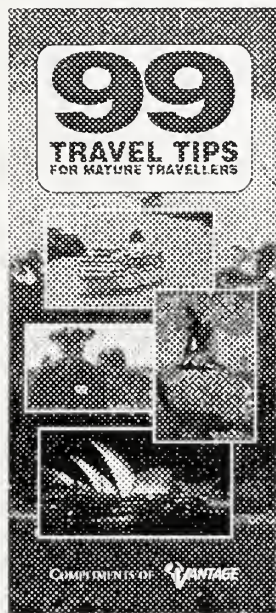
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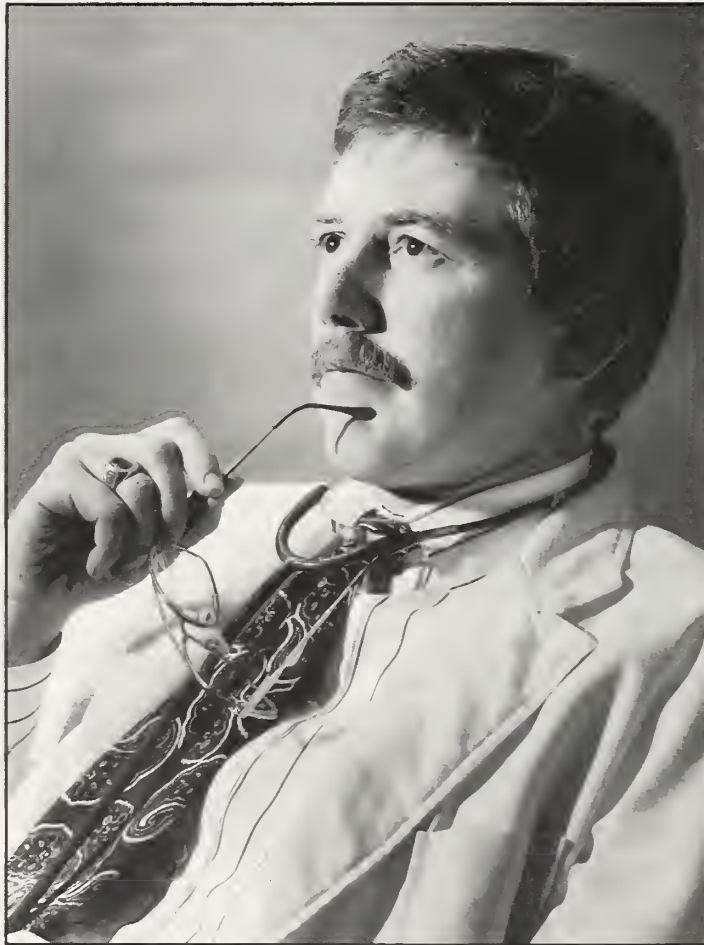
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JOURNAL OF THE KANSAS MEDICAL SOCIETY

Winter 1995

Volume 96, Number 4



- Primary Care Specialty Choices of KU Medical Students
- Malnutrition in the Elderly
- Information Technologies in Healthcare
- New CDC Guidelines for HIV Testing
- Hemophilia and AIDS in Kansas



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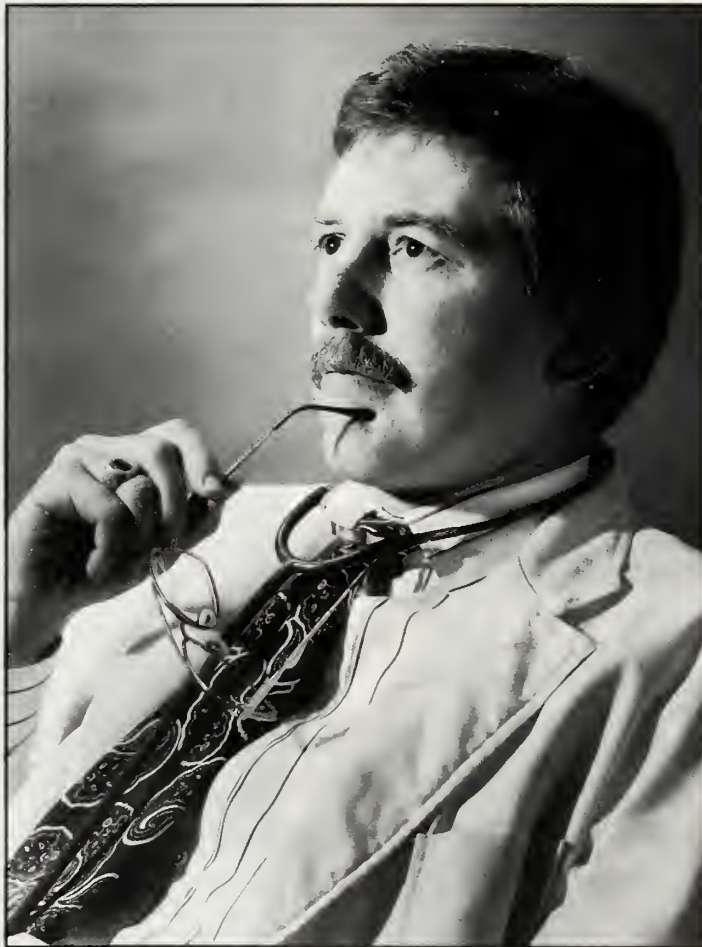
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**ABOUT OUR LOGO**

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

The cover photo shows the mitre of the Archbishop Arsenii, one of the fine examples of Russian craftsmanship that was part of the "Treasures of the Czars" exhibition held in Topeka during 1995. Those who failed to take advantage of this most impressive six-month-long display of artifacts from the 300 years of Romanov rule missed a spectacular opportunity that, unfortunately, will probably not be repeated.

The impressive headpiece was presented to the archbishop by Empress Elizaveta Petrovna, daughter of Peter the Great. The inscription "Presented to Arsenii, Archimandrite of the Troitse-Sergiev Monastery by Empress Elizaveta Petrovna November 25, 1744" is stamped on a gold band that runs along the lower edge of the mitre. Made of brocade, silk, gold, precious stones, pearls, glass and gold thread, it is more than an impressive work of art. It represents a blending of the religious and political powers that characterized the early Romanov dynasty.

The gold brocade is decorated with sparkling brilliant-cut diamonds, rubies, and smooth, carefully selected pearls — clearly a royal endowment, the work of the finest court artisans. The enamel panels that cover it contain portraits of the three-figured Deesis (Christ with the Virgin Mary on his right and John the Baptist on his left); the guardian angel; St. Zachary and St. Elizabeth (the empress' patron saint); St. Sergei of Radonezh and the Patriarch Nikon, founders of the Troitse-Sergiev Monastery; and the Trinity, on a lozenge-shaped panel in the center of the mitre. In addition to these religious icons, there are pearl-embroidered images of the two-headed Russian eagle under a crown, an orb and scepter in its claws. This was the symbol of Russia, adopted in 1472.

Thus, it would seem, there existed a close relationship between the church and the crown in the early days of the Romanovs' rule. This relationship seems to have been lost or diminished in later years; the last item in the exhibition is the famous 1913 Fabergé Easter egg commemorating 300 years of the Romanov dynasty. Covered with enamel portraits of each czar on the outside, the egg opens to reveal a blue-and-gold enameled miniature globe decorated with the continents. There are no religious

(Continued on page 157.)

Perceptions

A local hospital regularly surveys its patients on a variety of subjects regarding their perceptions of the care they received during their stay. This hospital also surveys the medical staff on care and the quality of care rendered by the hospital and nursing staffs. There are differences between patients' and physicians' responses regarding their perceptions of what constitutes quality care.



The patients list, in descending order of importance, friendliness, access (with minimal waiting time), involvement in the decision-making process, education about their condition and its treatment so they can make intelligent choices and decisions, and short waiting time for services. They desire a more "holistic" attitude in their health care experience: one in which their other needs — mental, spiritual, emotional — are considered and addressed, in addition to their physical problem. They consider themselves more than an ulcer, a heart or a broken femur.

Communication is very important to patients, as it should be. We physicians have been told innumerable times that 80% of lawsuits are the result of poor or no communication between doctor and patient. Communication influences the patient's perception of quality medical care. What we might consider a "touchy-feely" approach is more important to them than high-tech care — although they don't want the physician to cut costs or employ less than quality methods. And the quality of service, as measured by outcome, is also valued by patients.

The physician is an important factor in the patient's satisfaction regarding the hospital stay. In order of importance, patients ranked: involvement of staff, nursing, physician, room, food, and ancillary services (respiratory, x-ray, lab, admissions), in that order. The doctor may be considered the linchpin in the patient's satisfaction with his or her hospital stay.

When patients listed the desirable qualities of their personal physician, the two most important were discussing and answering questions, and relieving the patient's stress level. Not so important, surprisingly, were personal attention, cour-

tesy, and spending time with them. Again, it was communication on items they considered necessary for their education and peace of mind that guided their perception of quality care.

These items also correlate pretty well with patient loyalty: 78% of those surveyed had personal physicians. Of those, 40% will change physicians. While blue-collar workers are less likely to have a personal physician, they are more likely to exhibit loyalty to that doctor. Reasons given for changing physicians were, in order of importance: different specialist required by their condition, their doctor retired, insurance (only 8%) and quality of service (billing, office staff, waiting time).

As we enter the era of managed care, the physician would be well advised to heed these survey data and adjust one's practice accordingly. What we perceive to be quality care may not match the expectations of our patients. If we remember to treat patients as we would like to be treated, or to have our loved ones treated, our future will be bright and our success assured. After all, satisfied patients can be an important source of referrals.

Having become a patient myself, and having spent more time in physicians' waiting rooms, I have had several occasions to hear patients talk about doctors. The most frequent complaint is the failure to explain in layman's terms and to answer questions. As members of a learned profession that has knowledge not known to most people, we have a duty to educate and counsel our patients so they have the information they need to make an informed decision. Relegating that duty to staff is not proper. The patient has engaged us for that purpose and deserves our time and effort in establishing the doctor-patient relationship — a relationship that we argue mightily for in front of governmental agencies that would enact laws that could limit or replace it. If it is so important to us, it is worth cultivating and strengthening.

In closing, I would ask you to read what Dr. Arthur Hertzler wrote about the doctor-patient relationship. It appears in this issue's "Horse and Buggy Doctor" column. If Dr. Hertzler saw this as an emerging problem in his day, it is even

more important in our time. Patients will gravitate to those who make them feel cared for. This explains why quacks and so-called religious leaders, under the pretense of caring about their followers and their needs, are able to con them and take advantage of them. When physicians legitimately satisfy this need in their patients, it is good for both the patient and the doctor. W.E.M.

COVER STORY

(Continued from page 155.)

icons nor any indication of a religious connection on the egg. It is a most impressive example of the Fabergé genius and workmanship, yet perhaps it symbolizes the loss of a sense of divine guidance and with it a loss of values that resulted in the rulers being placed above their people and oppressing them, ultimately paving the way for the Russian Revolution. This in turn led to the tragic fall of the House of Romanov and their brutal massacre by the Communists. Only recently has the full story of that fateful, final night in 1918 become public. Perhaps there is a message in these magnificent artifacts.

AIM HIGH



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Things Are Changing — For the Better

Things are changing. How many times do we say that? How many times do we give that as an explanation for what is happening when we have no clue as to any other way to respond? How many times do we use it as an excuse for not having dealt with difficult issues to make a workable situation?



But this time the phrase is not a cop-out. It is not a "put-off." It is a real statement of what is happening at KMS — not a response to external forces, but a proactive move that we hope will help all our physicians. It is the establishment of a western Kansas KMS office.

As some of you may remember, I discussed this possibility at the Annual Meeting last May in my address to the House of Delegates. Later the concept was endorsed by both the Executive Committee and the Council — from then on we had our marching orders. After much examination of the possible locales and a study of the desired functions of the office, we decided to position it in Hays. We are currently advertising and interviewing to hire one person to staff it. That person will be quite unique, because he or she will have to be interested in being on the go, spending about 75% of his or her time on the road in the western part of the state, contacting physicians and, in a sense, bringing KMS to them.

The intent behind opening the office is to increase involvement of western Kansas physicians in the activities of KMS. Membership recruitment will be stressed, with personal visits made to all non-members in the region. Packets explaining the benefits of KMS membership, including information on Heartland Health, KaMMCO and MSC, will be available. Member retention activities will be an important part of the new employee's work. This will be accomplished through learning what physicians need

and finding ways to provide it. Physician support will be provided through coordinated educational opportunities, help with tasks such as dues billing and collection for county societies without office staffs, planned events to bring area physicians together, and regular personal contact. At this time, the western Kansas office is approved and funded as a two-year pilot project. If it is successful, it will be continued.

We have made arrangements with KaMMCO and Heartland Health to have a presence in this office, and they will share the expenses and salary of the employee. This will help to make these other arms of KMS more accessible to western Kansas physicians. KaMMCO and Heartland Health may add their own staff members to the office as the need arises.

I am very pleased at the way the concept of the western Kansas office has been supported by physicians across the state — not just in western Kansas. As I travel, I receive nothing but enthusiastic endorsement of the plan to be in that area serving more physicians. In fact, physicians in southeast Kansas already have expressed an interest in a similar office for their area.

Our members do see the need for us to act together, to be able to communicate with one another and meet problems with constructive solutions. This type of collective action and understanding can only be accomplished by better communication. We sincerely hope that this will be only one of many successful activities of KMS to unify and serve the physicians of Kansas.

Yes — things are changing at KMS. Today that means a new office to better serve a large part of our rural membership. And tomorrow: yet more progress in furthering communication among Kansas physicians.

A handwritten signature in dark ink, reading "Linda D. Wanner, M.D." The signature is fluid and cursive, with a large initial "L" and "D".

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New CDC Guidelines for HIV Testing

WAYNE T. STRATTON, J.D.,* *Topeka*

The Centers for Disease Control and Prevention (CDC) recently released recommendations for HIV counseling and voluntary testing for pregnant women. Former guidelines, issued in 1985, recommended that physicians concentrate on testing pregnant women known to be in a high-risk category. The current guidelines, however, advise doctors to strongly encourage all pregnant women to undergo testing for HIV infection.



The new recommendations were developed following a National Institutes of Health (NIH) study which found that pregnant women can reduce the chances of passing HIV to their babies by almost two-thirds if given AZT or ZDV therapy as soon as they test positive during the pregnancy, and the newborn continues with the therapy for the first six weeks after birth. The goal of the guidelines is to identify HIV-positive pregnant women as early in the pregnancy as possible through a voluntary testing program.

The CDC hopes that the new guidelines will develop into the standard of care for medical providers across the nation. Providers can follow their current procedures for pre- and post-test counseling, such as outlining what high-risk behavior is, and what therapy is available.

The new guidelines include the following recommendations:

- Health-care providers should counsel all pregnant women about HIV and encourage them to be tested.
- HIV testing of pregnant women and their infants should be voluntary. Women who refuse or test positive for HIV should not be denied

health care services, be discriminated against, or be reported to child protective services.

- Counseling and testing should be offered as early in the pregnancy as possible.
- Involuntary testing should never be substituted for counseling and voluntary testing.
- Health-care providers should provide appropriate post-test counseling for all pregnant women, and discourage infected mothers from breast-feeding.

Informed Consent Issues

Although the recommendations stress voluntary testing, providers still need to obtain informed consent before testing any patient. In order to comply with informed consent standards, providers should explain to the mother exactly what HIV is; how it affects her body, health and pregnancy; and what current treatment options are available. The provider should also explain the benefits and negative aspects of testing.

In terms of obtaining the actual consent, providers can take a right-of-refusal approach, or obtain specific consent. When the provider tells the patient the test will be performed unless she objects, it is known as right-of-refusal. Specific consent is asking the patient directly if she wants the test, then waiting to obtain her answer verbally or in writing. Although some physicians maintain that the patient's verbal consent is all that is necessary, it is often in the provider's best interest to use a consent form for any test or medical procedure. By signing, the patient states that she received the necessary information and considered all the issues involved, and that she made an informed decision to have the test administered. A consent form can have the added advantage of giving the patient pause to think of additional questions or concerns before signing, rather than just verbally agreeing to what the physician suggests.

A provider needs to avoid coercing a patient into having the HIV test. One way to handle a hesitant patient is to offer the patient the option of returning later for further discussion so she can have time to think about her decision. This option is especially useful if used before the 14th

*KMS Legal Counsel.

Comments made herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas Ave., Topeka, Kansas 66603.

week of pregnancy, as the AZT therapy will be delayed until then.

Reporting Duties

Under Kansas law, when a physician has information indicating a positive test for HIV, the physician must report the result within one week of obtaining the results of the test. This requirement does not change under the new guidelines. The report must be made to the Secretary of Health and Environment and must include: the type of test, date the test was administered, result, sex, date of birth, county of residence, and racial and ethnic group of the person tested. If the physician is reporting a positive test for HIV only, the patient's name need not be given. However, if the test is positive for AIDS, the patient's name must be provided, along with all the above information.

A physician should tell a patient about the reporting requirements before administering the test. This allows the patient to make a sound decision, fosters a better relationship between provider and patient, and may avoid breach-of-confidentiality complaints later on. The provider should emphasize that any information given to the secretary of health and environment is held in the strictest confidence and is revealed only to a limited number of people on a need-to-know basis.

Pending Legislation

Although the CDC explicitly maintains in its guidelines that testing pregnant women for HIV should be voluntary, there is a bill pending in Congress that would require states to mandate HIV testing of all babies born to women who do not receive a prenatal HIV test. The Ryan White CARE Act provides states with grants for care of people with AIDS. However, the proposed bill would make the mandatory testing a prerequisite to receiving funds. Until May 10, 1995, the CDC had a policy of anonymous testing of newborns and prohibited disclosure of the results even to parents. However, the CDC currently has no policy on testing newborns.

The CDC recommendations are just that — recommendations. For physicians, however, they may soon be the standard of care in the health-care profession. Providers should be sure to obtain informed consent before giving the HIV test, and to comply with all reporting requirements currently in force.

Information for Authors

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The Case Against an Emergency Medicine Residency in Kansas

LARRY R. ANDERSON, M.D.,* *Wellington*

Emergency medical care is an integral part of any health delivery system. Kansas citizens deserve the best emergency care that can be reasonably provided considering the wide variation in emergency health care needs and the frontier status of some parts of Kansas.

An article in the Spring 1995 issue of *KANSAS MEDICINE* by John Jeter, M.D., and Dennis Allin, M.D.,¹ would suggest that the next step in Kansas emergency medical care is the development of an emergency medicine residency at the University of Kansas School of Medicine. Physicians who have completed residency training in emergency medicine and are diplomates of the American Board of Emergency Medicine are usually well qualified to provide emergency medical services. The fact of the matter is, however, that few Kansas hospitals can afford their services. Furthermore, the health care system of the future will divert most of the current ER traffic to offices of primary care physicians for comprehensive, continuous, cost-effective health care, as opposed to episodic, non-comprehensive and expensive emergency room services.

As the national debt forces Medicare/Medicaid reform, with shifting of direct medical education (DME) and indirect medical education (IME) reimbursement away from the historic in-patient model, it seems unwise to fund the establishment of another hospital-based residency at the University of Kansas School of Medicine (Kansas City or Wichita campus).

Drs. Jeter and Allin quote a study² which states that "few institutions without emergency medicine residency programs had formal curricula for their residents or students." I would hope this is not the case at the University of

Kansas School of Medicine! If it is, I am certain that these two physicians are actively striving to develop a formal curriculum to ensure that all KU medical students and residents will receive structured teaching in emergency medicine. Excellent emergency medicine training for general pediatricians, general internists, family physicians and general surgeons is critical, as these doctors have been and will continue to be the physicians providing emergency medical services in most Kansas communities.

Drs. Jeter and Allin cite retrospective studies by McNamara and Kelly^{3,4} to suggest that ER services provided by emergency medicine residency graduates are of higher quality and more cost-effective than those provided by other physicians. These poorly devised studies compare 90 days of ER care provided in a community hospital by a nine-physician group (of whom three were board-certified in internal medicine and six were not board-certified) with 90 days of ER care one year later, after an emergency medicine residency was established. The emergency medicine residency was staffed by 16 faculty physicians (15 were board-certified in emergency medicine; all 16 were single- or double-boarded), with the additional 24-hour-a-day presence of at least one and often two second- or third-year emergency medicine residents. This first study³ was based on a review of paperwork (i.e., charting) with no attempt at actual measurement of patient outcomes. Sixty-one percent of the patients were seen by a resident prior to consultation with the attending faculty. From an evaluation of the chart, these investigators concluded that better care was provided by the emergency medicine residency faculty and residents. An additional wrinkle is that the criteria used for this paper review were policy guidelines developed by the American College of Emergency Physicians — guidelines which we must assume were well known to the emergency medicine residency faculty. It seems unfair to grade the paperwork of the first group of physi-

*Family physician, Sumner County Family Care Center. Address correspondence to Dr. Anderson at 1323 North A Street, Wellington, Kansas 67152

cians against a second group which had twice the work force and who were probably more concerned about care of the chart than the first group of physicians.

The second article⁴ by McNamara and Kelly studied the same physician groups, the same time periods, and the same community hospital emergency room services to conclude that emergency residency-trained physicians provided less-expensive services in caring for patients with viral upper-respiratory infections, pharyngitis, acute asthma, seizures, lumbosacral strain, and cervical strain. This article admits that "test-ordering behavior of housestaff is significantly influenced by their attending staff," and that "recently, medical faculty have been exhorted to teach the value of cost-effective care." This exhortation may have been the stimulus which prompted the emergency medicine residents and faculty to save money by ordering fewer throat cultures, lumbar x-rays, and cervical spine x-rays than did the previous ER physician group. The real issue, however, is that except for a few of the asthma and seizure patients, this ER population should have been seen in the offices of their personal physicians, not in the emergency room!

In their article,¹ Drs. Jeter and Allin project that within a few years of establishment of an emergency medicine residency, the quality of emergency care in Kansas will be substantially

improved in communities of "greater than 20,000." Even if this is true, what about the other 95 Kansas counties?

At a time when funds for education of students and residents will be limited, and in a state where the majority of emergency departments will be staffed by local physicians or moonlighting residents, we should not establish a new emergency medicine residency in Kansas City or Wichita. However, we should coordinate statewide efforts in support of Drs. Jeter, Allin and other excellent teachers of emergency medical care to insure that student, resident and CME training is adequate to provide well trained physicians for all Kansas emergency medical needs.

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A General Practitioner in Turn-of-the-Century Kansas: W.A. Carr, M.D. (1877-1975)

NANCY D. BARNES, C.A.G.S., M.A.; AND ANGELA D. CURRAN, M.H.A.*

At the turn of the century, the eastern Kansas town of Junction City bustled with a population of 7,000. It was rural Geary County's largest community, located approximately 65 miles west of Topeka and a few miles south of Fort Riley, a U.S. Army base. The county's citizens were engaged in a variety of occupations as shopkeepers, federal government personnel, mill workers, railroad employees, agricultural workers, and providers of professional services.

In 1911, Junction City had a dozen physicians. Although the closest community hospital was in Topeka, and medical care was financed on a cash, credit, or barter basis, the area was fortunate to have the benefit of many dedicated, horse-and-buggy doctors.

Country Doctor and Community Leader

Walter Austin Carr, M.D., was one member of this pioneering cadre of physicians. A native Iowan, Dr. Carr received his medical degree from Northwestern University in 1905. In 1906, he opened his Junction City medical office above a downtown drugstore. His career would eventually span five decades in the town. Dr. Carr displayed a remarkable commitment to the county and its people. He served as president of the Chamber of Commerce, functioned as a mediator on a liaison committee between Junction City and Fort Riley, was active in public service organizations such as the American Legion and the Masonic Lodge, and was



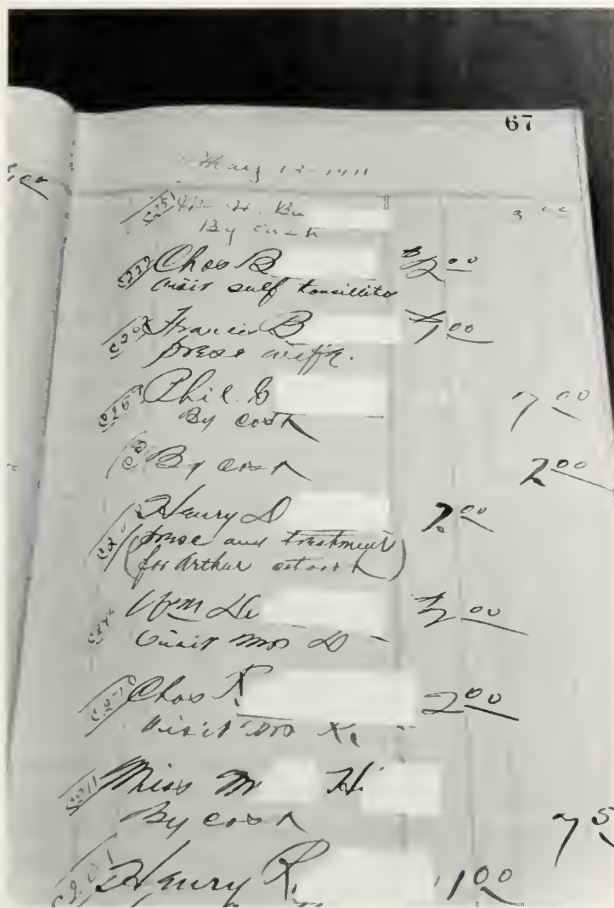
Walter Austin Carr, M.D., in World War I uniform. Photo courtesy of the Geary County Historical Society Museum.

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Acknowledgments: The authors wish to thank Dr. Carr's granddaughter, Suzanne Morantz, without whose assistance and cooperation this article would not have been possible. Also, special thanks to David Newman and Sharon White of the Geary County Historical society, and Susan Case of the Clendening Library of the History and Philosophy of Medicine at the University of Kansas School of Medicine.

involved in public health issues. Records show he was a member of the Kansas Medical Society.

As a leader in public health at the local level, Dr. Carr sponsored a Junction City ordinance that prohibited the sale of unpasteurized milk. This is historically noteworthy since tuberculosis was a major public health concern in Kansas during the first two decades of this century. Dr. Carr's community efforts were reflective of a statewide initiative to combat the deadly disease; the latter even included a tuberculosis exhibit that toured the state with a display of a "model dairy."¹



A page from Dr. Carr's day book, May 13, 1911.

One of Dr. Carr's most far-reaching endeavors was his involvement, in 1913, in the establishment of the first hospital in Geary County. As a member of a group of six founding physicians, Dr. Carr served as secretary of the board of officers and incorporators of the Junction City Hospital. A local newspaper article in 1915 proudly described the institution's surgical facilities:

"The operating room is perfectly lighted and is equipped with modern appliances for successful operations....The operating room is supplied with a high pressure sterilizer for the pressure sterilization of instruments, towels, bandages, etc."

The same article also describes the medical advances of the era:

"Of all the professions perhaps none has made more progress in the last generation than that of medicine and surgery. The discovery of general anesthesia...the determination of the cause of suppuration in wounds...the discoveries in the laboratory of the origin of disease and the anti-toxins with which to combat it...the invention of various

instruments to examine the hidden parts of the body, as well as a new source of light by which even the skeleton is plainly seen."²

While there were many medical and technological advances that benefitted Kansans in the early 1900s, the general practitioner was truly the primary health care provider in the community. Dr. Carr's long and successful career in the Junction City area is testimony to his service and commitment to these citizens.

During the early years of his practice, Dr. Carr maintained a daily, written record of his medical activities in a "day book." One of his descendants recently donated the book, covering the period 1911-13, to the Archives for Family Practice, administered by the American Academy of Family Physicians Foundation, Kansas City, Missouri. For more than two decades, Dr. Carr was a member of the American Academy of General Practice. This organization, founded in 1947, changed its name in 1971 to the American Academy of Family Physicians. The following excerpts from Dr. Carr's day book offer glimpses into the daily life of a family physician of his era.

May 13, 1911

May 13, 1911 was a fairly typical day for Dr. Carr. He saw five male and six female patients. Of this group, eight were adults and three were children or adolescents. As was customary, patients had the option of visiting Dr. Carr at his office at 701½ N. Washington Street or requesting a home visit. On this date he made three house calls to adult patients.

Continuity of care is apparent upon examination of the day book. When a patient's condition is not specified on a particular day, earlier or later entries often list the condition for which treatment is sought. Consequently, it can be determined that on May 13 Dr. Carr's patients were treated for the following: tooth abscess, accidental injuries, catarrh, gynecological dysfunction, stomach ulcer, syphilis, tonsillitis, and urethral stricture.

A longitudinal analysis of the entries in Dr. Carr's day book shows that some conditions were chronic, such as Mrs. William D's ulcer. Dr. Carr visited Mrs. D at home more than fifty times in six months. Although not quite as severe, the catarrh suffered by Mr. Henry D's son required nine treatments over two months, including cauterization of the nose. Mr. Albert K required "sounding" for his urological problems



First Junction City Hospital (1913-1921), located at 2nd and Adams. Photo courtesy of the Geary County Historical Society Museum.

nine times in two months. (A sound was a long, slim, slightly conical instrument of steel for exploring and dilating the urethra.)³ Some patients sought treatment from Dr. Carr on a continuing basis for various acute conditions. Typically, families with children and individuals exposed to contagious diseases comprised this group.

A doctor of 1911 prepared himself for any condition he might encounter in the course of his daily practice. Certain entries in the day book indicate that Dr. Carr consulted with other physicians in Junction City. He also called upon other doctors to administer anesthesia during operations, but these situations resulted more from cooperation than from strict medical referrals.

On May 13 Dr. Carr billed 11 patients for \$17.00 in charges, but received no payment for services rendered that day. However, he did collect \$20.50 for five outstanding accounts. After a 60-day period, his receipts for medical services rendered on May 13 came to \$11.00, equalling a 65% collection rate.

The Cost of Health Care, 1911-13

Payments for medical care were made in a variety of ways, and Dr. Carr appeared to adjust his practice accordingly. Since many Junction City employers distributed paychecks only once a month, the accounts receivable ledgers of community doctors probably fluctuated with the cash flow of their patients.

Sometimes an individual with a different surname than the patient would be listed as the payer of a bill. It is difficult to know in every case

what the relationship was between the patient and the payer, but the prevalence of extended families in that era likely accounts for some of those payment arrangements. There may also have been instances where concerned friends paid for the treatment of an indigent individual.

In other cases, patients had to resort to bartering their furniture and household goods to pay an overdue bill. Such was the case in November 1911, when Mr. and Mrs. William D traded Dr. Carr a chair, some shades and a buffet to pay for \$56.40 of their bill for treatment of Mrs. D's stomach ulcer.

Dr. Carr's charges for medical care were consistent during the three-year period represented in the day book. A routine office call cost \$1.50. House calls cost \$2.00, unless they required lengthy travel, in which case he would charge more and note "country" or indicate the actual mileage traveled. He typically traveled on foot or by horse-drawn conveyance. If his patient was at Fort Riley, he may have used the streetcar for the six-mile round trip.

Childbirth was an ordeal for both patient and physician. Dr. Carr charged \$15.00 for a birth with no complications. The time required to attend most labors and deliveries accounts for the relatively high cost. The charge rose to \$25.00 if the birth required forceps.

Most medical procedures cost \$1.50. Sometimes these required the use of an instrument, such as for Mr. Albert K's sounding. Procedures also included dressings for wounds, the application of ointments, and irrigation of an affected area.

Conclusion

Today the general practitioner, now known as the family physician, is in critically short supply in many parts of Kansas. Geary County now has a population of 30,000 and, with a ratio of one physician per 3,000 people, it is recognized as one of these underserved areas. In an effort to cultivate more primary care physicians for the county, Junction City will soon become one of five "outpost" locations that the University of Kansas School of Medicine has designated as a family practice residency training site.⁴

From an archival perspective, an historical artifact such as Dr. Carr's day book offers a tangible glimpse into the past. Not only can it encourage and cultivate a greater understanding

(Continued on page 168.)

Information Technologies in Healthcare

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Healthcare is fertile ground for information technologies. There are tremendous amounts of money in this industry; in fact, the U.S. economy in healthcare is more than the gross domestic product of all but a few countries. Thus, the demand on the “center of the universe” of healthcare, the medical record, is tremendous and growing rapidly. Paper systems can no longer adequately meet the demand.

We now look to computer systems (hardware and software) for answers to these information needs. Hardware is scientific, structured and rigorous, and is developing rapidly. Software design is artistic and abstract and facilitates most of the interface between computer and user. Together they continually increase their presence in the processes we use.

Software

There are several software approaches to information management, each with strengths and weaknesses. They include text processing, spreadsheet, database, knowledge base and neural network. Text processing has rich expression capabilities but doesn't handle large amounts of information well and is not amenable to queries. Databases handle large amounts of information efficiently, but lack the ability to provide a tailored medical record. Knowledge-based systems provide pre-processing. As symptoms and findings are recorded, the knowledge system narrows the differential diagnosis list. Adaptive neural networks (able to learn from physician-patient encounters and predict the protocol for the optimal outcome) are in their early infancy, but as these mature they will change the character of medical practice more than any previous evolutionary event. This will be the true future shock — surpassing the profound effect of managed care on the medical community.

Two variables are interdependent: “human

ware” and information technology. Humans have always strived for new and better ways of doing things, yet have resisted their implementation at the “front line.” We don't like change. Yet change will occur in healthcare as physicians assimilate new ways of doing things and as technology becomes friendlier, more transparent and embedded in the processes we use.

Making Data Available

As information technology develops and is implemented, there will be increased quality with decreased cost of healthcare. An area of importance to us all is data capture. Keyboard input is inefficient, error-prone and time-consuming. Light pen, stylus, handwriting recognition, and voice recognition are developing methods of handling data capture efficiently. Improvements will be seen in adjacency, the time between data generation (i.e., physical examination) and data capture (i.e., recording of findings). This will result in a more complete and accurate medical record. The information also will be available sooner to others with the right and need to know it. To ensure maximum value from this medical record, connectivity is crucial.

Connectivity (availability of medical information to anyone who has the right and need to know) is a formidable and important barrier to efficient information management. There are different computer software operating systems, various computer hardware systems, incompatible applications software, and limited networking. There will be “survival of the fittest” in data interchange technology and standards. The most effective and efficient driving force for this will be informed and educated consumers, demanding high connectivity. This will be very important to managed care organizations, which work with populations rather than individuals, and they likely will lead the thrust for greater connectivity. As connectivity is improved another hurdle arises: how to display all this information in a meaningful way.

High connectivity results in tremendous amounts of information. How can it be managed? What are the goals of this management?

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Complicating this issue is the diffuse nature of a patient's health information. It is literally more than a lifetime long. Multiple providers are involved. Multiple facilities are used to consume healthcare. Powerful and sophisticated computer systems will be needed to keep complete records. Once data capture and connectivity are solved, the greatest challenge will be pre-processing and processing of data.

Pre-processing and processing will metamorphose data to information, information to knowledge, knowledge to disease management planning, then to disease prevention. Expert systems and neural networks will be involved in this transition.

Using Technology Wisely

Each advance in technology gives us something, but it also takes something. We should ask questions when a new technology arrives. What are the ethical issues? What are the side effects? What will be the unintended consequences?

Maintaining the patient's best interest as the central theme during this infusion of information technology into our profession may be a daunting task. Maintaining our professionalism may also be challenging. Practicing physicians must take the leadership role in harnessing this medical information revolution. We must implement information technologies to serve the patient, not the system.

MEDICAL MILESTONES

(Continued from page 166.)

of previous events, but it can also offer insight into current and future activities. Family medicine, like other specialties, can benefit from the preservation of its professional heritage, as it provides the contextual framework in which the specialty's evolution and development may be examined. The preservation of such artifacts in archives also serves as a tribute to the many dedicated physicians like Dr. Carr who, several generations ago, set the pace for the medical journey that continues today.

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Continue Title X

A potential crisis looms on the horizon. Family planning funds have come to the states' health departments from the Title X program of the federal government. Recently the House deliberated for quite a period of time before agreeing to continue the Title X program. There is no way of knowing whether the Senate will be willing to go along with the funding or whether the monies ultimately will be transferred to the states in block grants.

If the states were to receive block grants and family planning funds be included therein, it seems important that in Kansas we should be prepared to have our legislators in 1996 direct specific financial support to the program. Only then will this important sociomedical activity be continued at its current level or, better yet, be enlarged.

The family planning program is delivered only to persons with incomes one and one-half times the poverty level or less. It currently serves approximately 55,000 women in Kansas. For the majority of the women who receive this service, it is their only source for maintaining women's health. A complete physical as well as laboratory work, Pap smear and contraceptive prescriptions are included. The program gives these women education, infection discovery, cancer prevention, general health evaluation, etc. It should not be associated with the mistaken idea that abortion is foremost in the minds of those agencies which are rendering this service. In Kansas, local county health departments and Planned Parenthood clinics without abortion are involved.

I urge Kansas physicians to be aware of what happens to the family planning funds as this issue passes through the U.S. Senate. It is important that physicians be prepared to inform their patient voters and hence the Kansas legislators of the need to maintain financial support for the family planning health services. Without such a service, welfare subsidies will probably increase and require additional monies from Kansas taxpayers. With the program the number of abortions would potentially be reduced through a reduction in illegitimacies.

Donald J. Smith, M.D.
Past President
Johnson County Medical Society

Primary Care Specialty Choices of University of Kansas Medical Students, 1982-1991

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P rimary care specialty choices of medical students in their first and fourth years were correlated to 1) compare practice choices at two time-points, 2) look for trends in primary care specialty choices by gender and year of graduation, and 3) observe the effect of a first-year clinical apprenticeship assignment on residency choice. A convenience sampling of a cohort of 10 graduating classes of medical students (1982-91) from the University of Kansas School of Medicine in Kansas City was used, employing a before-after design. It included 1,769 students (1,249 males, 520 females) who had participated in a required clinical apprenticeship during their first year. Freshmen students' top medical specialty choices largely dictated clinical assignments for an apprenticeship of approximately 15-20 hours over a five-week period. We compared first- versus fourth-year medical specialty choices by students, observed the trend over time in primary care choice by gender and year of graduation, and correlated first-year clinical assignment with subsequent choice of a primary care residency. Over 10 years an average of 45.5% of students chose primary care in the first year and 53.1% in the fourth year ($p = 0.41$, NS); over 10 years, there was a significant decline in trend of primary care choices by men ($p < 0.001$), but not by women; and both apprenticeship assignment and students' first choice were significant predictors of eventual residency choice of a primary care specialty.

Introduction

There is concern about decline in interest in primary care specialties by U.S. medical school graduates.^{1,2} Legislators of states with large medically underserved rural areas, as well as those from heavily urbanized areas, have questioned whether or not their state schools are doing everything possible to ensure adequate numbers of primary care physicians.³

Some state legislatures have considered mandating that a certain percentage of each graduating class must choose primary care if the medical school wants to avoid budgetary penalties.⁴ Medical school faculties need to examine their curricula to determine if there is conscious or subconscious effort on their part to diminish graduates' interest in primary care in favor of subspecialties and surgery.

Choice of a medical specialty is not static, but changes over time. Babbott, et al.⁵ noted that the 1987 USA cohort of senior medical students, as compared to the 1983 cohort, were significantly more likely to choose general and subspecialty internal medicine, pediatric subspecialties, psychiatry, obstetrics and gynecology, anesthesia, radiology and rehabilitation medicine and less likely to choose family practice, general surgery, pathology and public health.

Decisions to enter family practice seem more likely to be made early in medical school, or even prior to entering medical school, than are decisions to enter other specialties.⁶⁻⁸ However, medical school courses were found by Nieman, et al.⁷ and Greer and Carline⁸ to be a major factor in the choice of family practice versus other primary care or non-primary care specialties.

Controlling one's lifestyle has emerged as a very important factor in medical career choice, and its importance may be increasing with time.⁹ Although income was a significant factor, loan indebtedness was rated by graduating medical students from California in 1988 as one of the

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least significant influences for specialty choice.¹⁰ In spite of this, however, the economic factor cannot be ignored.

To date no study of medical student specialty choice has addressed gender specifically, though Lieu, et al.¹⁰ found that 1988 graduates who entered primary care specialties versus technology-oriented specialties were significantly older and included more women. In studying residency choices of medical school honors graduates, Golden¹¹ noted that male honor students were likely to choose surgical disciplines, while female honor students tended to choose pediatrics or obstetrics and gynecology.

Whatever the causes for the current decline in interest in primary care specialties, two recent writers have crystallized the problem. Colwill concluded his study by stating that "neither society nor the medical profession benefits from the decline in interest in primary care."¹² Petersdorf¹³ concluded that "in our country the generalist specialties suffer from the Rodney Dangerfield syndrome — they get no respect." He observed that the medical community should seek to have 50% of medical school graduates enter primary care specialties, accomplishing this before it is mandated by law.

At the University of Kansas School of Medicine, first-year students are introduced to clinical medicine by brief apprenticeships to practicing physicians in a course entitled "Clinical Sciences II." This apprenticeship consists of weekly half-day visits for five consecutive weeks. Clinicians in the community are invited to participate in the course, and each year about 80 physicians in the Greater Kansas City area volunteer to teach in this program. Each physician may be assigned from one to six students per semester, on one or two afternoons a week, one student at a time. Since 1978, the first-year students have been offered the opportunity to express their preference about which specialty they wished to visit, by ranking the choices in their order of preference, from a list of specialties.

Because this same assignment scheme was repeated year after year since 1978, it seemed worthwhile to investigate whether one might be able to discern a relationship between students' first-year choices and assignments and their ultimate residency specialty choices. We analyzed these data for the School of Medicine of the University of Kansas graduating classes of 1982 through 1991 to 1) determine whether or not

there was an association between the primary care choices of first-year medical students and their subsequent residency choices; 2) determine if there was a trend over time and whether gender was important in the choice of a primary care discipline (family practice, internal medicine, pediatrics, med/peds) for residency; and 3) determine whether primary care residency choices appeared to have been affected positively or negatively by assignment to their first choice in the first-year apprenticeship experience. In other words, did specialty preferences among medical students change from their first to their fourth years? If so, how? Was there a change in specialty choices over time and according to gender? Was assignment to a specific specialty, whether wanted or not, related to the ultimate residency choice, and if so, how?

Method

Each year, in late summer/early fall, we invited physicians in the Greater Kansas City community to volunteer to teach in the medical school course and to accommodate from one to six students during the upcoming spring semester of the first year of medical school. Three modules consisted of five weeks each. Visits were scheduled for half-days for these five consecutive weeks. Physicians could volunteer for all three modules, once or twice weekly. Most signed up for once weekly and three modules, thus being assigned a total of three students.

When we had an adequate number of physician volunteers for each of three Tuesday and three Thursday modules (usually around 30 physicians each module), we listed the available specialties and subspecialties (but not physician names) for each of the six modules so that the students could select from them in their order of preference. The number of specialties available to the students varied according to the modules, the day of the week and also the specific year, but commonly included the following specialties: allergy, cardiovascular disease, dermatology, family practice, gastroenterology, hematology, internal medicine, neurology, obstetrics and gynecology, otorhinolaryngology, pathology, pediatrics, pediatric cardiology, physical medicine and rehabilitation, pulmonary diseases, radiology, rheumatology, surgery (cardiovascular, general, neurological, orthopedic, plastic), and urology. Some specialties (e.g., anesthesiology, ophthalmology, psychiatry) were never offered in this course because of the logistical difficulties in

TABLE 1
FIRST AND FOURTH YEAR MEDICAL SPECIALTY CHOICES FOR ALL MEDICAL STUDENTS
AND ACCORDING TO GENDER
(Classes 1982-1991), number (%).

Group	Primary Care	Med/Ped Subspecialties	Surgical Subspecialties	Other	Total
Males(n=1249)	532 (42.6%)	128 (10.3%)	566 (45.3%)	23 (1.8%)	1249 (100%)
	624 (50.0%)	21 (1.7%)	323 (25.9%)	281 (22.5%)	1249 (100%)
Females(n=520)	273 (52.5%)	59 (11.4%)	178 (34.2%)	10 (1.9%)	520 (100%)
	315 (60.6%)	9 (1.7%)	88 (16.9%)	108 (20.8%)	520 (100%)
All(n=1769)	805 (45.5%)*	187 (10.6%)	744 (42.1%)	33 (1.9%)	1769 (100%)
	939 (53.1%)*	30 (1.7%)	411 (23.2%)	389 (22.0%)	1769 (100%)

----1st year choice*

----residency choice (p=0.41,N.S.)

readily adapting these practices to our program. Some specialties (e.g., family practice, internal medicine, and pediatrics) included a number of physicians and so were always offered, while others (e.g., neurosurgery) might include only one physician.

The students' preferences were computer-matched with the available specialty slots, so that students received their highest possible preference ranking. Typically, 90% or more received one of their first three choices. Preliminary matches were made to give each student his or her highest possible choice of available specialties. Iterations were run up to 30 times so that students who received low choices would have the opportunity to move to a higher choice. This might result in lowering the choices of those who initially received their first choice. The repetition helped to make the matching as equitable as possible for all students; more than 30 iterations proved not to be better.

After the matching process, the students were assigned to a specific physician, whom they would be scheduled to visit one afternoon per week for five consecutive weeks. Students were advised that the purpose of the visit was to observe the physicians with their patients. More active participation was left to the discretion of

each physician. All students and physicians had an opportunity to evaluate the experience, and with rare exceptions from either group, the feedback was positive.

A record was kept of the first choice of each student as well as the assignment each received. Eventual residency placements were obtained from the office of the medical school dean upon graduation and were tracked even when students did not graduate with their original class. In the event of a preliminary or transitional program (such as occurred frequently with internal medicine, which serves as a first-year requirement for some specialties), every effort was made to discern the ultimate choice by the graduate (e.g., anesthesiology, ophthalmology, etc.).

Analyses. For the sake of simplicity, both the first-year choices and the residency choices of specialties were combined into categories as follows. The primary care specialties were designated as medicine, general pediatrics, family practice, and combined medicine/pediatrics (med/peds). Medical and pediatric subspecialties included allergy, cardiovascular disease, dermatology, gastroenterology, hematology, nephrology, neurology, pulmonary disease, and rheumatology. Surgical subspecialties were cardiovascular, general, neurosurgery, obstetrics

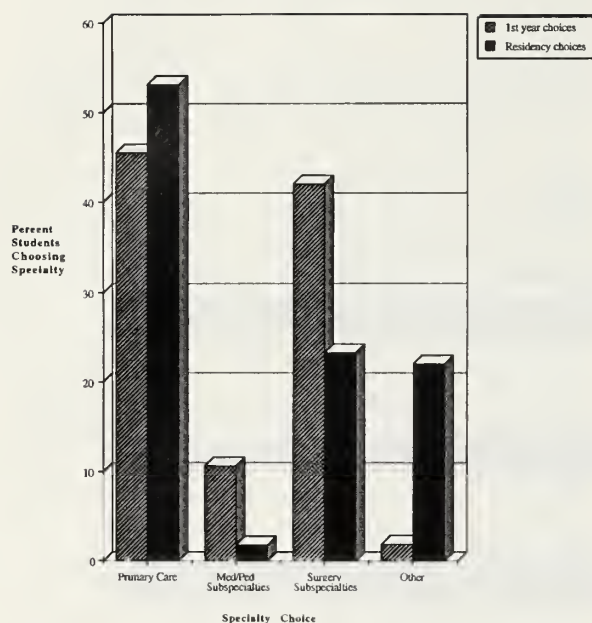


Figure 1. First- and fourth-year medical student specialty choices, both genders combined, 1982-1991 classes (n=1,769)

and gynecology, ophthalmology, orthopedics, otorhinolaryngology, plastics, urology, and vascular. A category "other" applied usually to residency choice and included anesthesiology, emergency medicine, pathology, physical medicine and rehabilitation, psychiatry, radiation oncology, and radiology.

To determine whether there was a correlation between the practice choices of the first-year students and their ultimate residency choices, we cross-classified each student in a contingency table array. We used McNemar's tests for the dif-

ference in related proportions to analyze these data. We used statistical tests for linearity of trend in proportions to determine statistically significant trends by gender in residency choice of primary care specialties according to year of graduation.¹⁴ Multiple logistic regression was used to determine significant predictors of primary care residency choice from among first-year choice and assignment categories.

Results

The total number of students who entered the University of Kansas School of Medicine in the 10 classes was 1,936 (1,365 males, 571 females), with a range from 174 to 203 per class. A number were excluded from the final analysis because of death (1), withdrawal, dismissal, transfer, student error in marking computer cards, or because the student was still in school (especially in the original 1990 and 1991 classes). Of the total of 1,936 students, 167 or 8.6% were excluded (8.9% of all females and 8.5% of all males). This left 1,769 students (1,249 males, 520 females), who were included in the study, and all were accounted for.

Association of practice choices in first versus fourth years. Table 1 shows the numbers and percentages of all medical students (classes 1982-91, total and by gender) whose first choice as a first-year student was one of the primary care specialties, a medicine/pediatrics subspecialty, a surgical subspecialty, or other, as well as the number and percentage of students who, as graduates, selected residencies or specialties in those same general areas. See also Figure 1. According to Table 1 and Figure 1, 45.5% and 53.1% of the first- and fourth-year students, respectively, chose a primary care specialty (p =

TABLE 2
NUMBER OF MEDICAL STUDENTS WHO CHOSE A SPECIALTY IN THE FIRST YEAR, AND THE NUMBER AND PERCENT WHO ALSO CHOSE THE SAME SPECIALTY ON GRADUATION (Classes 1982-1991).

Specialty	No. who chose specialty in the first year	No. (and %) of original first year students who chose the same specialty on graduation
Primary Care	805	502 (62.4%)
Med/Ped Subspecialties	187	10 (5.3%)
Surgical Subspecialties	744	261 (35.1%)
Other	33	17 (51.5%)
Total	1769	790 (45.0%)

0.41, NS). Med/ped subspecialties dropped from 10.6% in the first year to 1.7% in the fourth, surgical subspecialties dropped from 42.1% to 23.2%, and other increased from 1.9% to 22%. Over this same time interval, males increased from 42.6% to 50.0% in choice of primary care, while females increased from 52.5% to 60.6%.

Primary care choice over 10-year period. Figure 2 shows the percentage trends in selection of a primary care specialty displayed according to year of graduation and according to gender. It can be readily appreciated that the percentage of males entering primary care decreased over the time period 1982-91, whereas that of females did not show a downward trend. Statistical tests for linearity of trend in proportions showed no significant trend of primary care selection over time by women, but showed a significant decline in the trend of males selecting primary care ($p < 0.001$).

We wished also to look at changes made by individuals, and we considered how many individuals of each group who had chosen a particular specialty at the beginning of medical school persisted to the end with that same choice. For example, of the original first-year students who chose a primary care specialty, Table 2 shows that 62.4% chose primary care again at graduation, whereas only 35.1% of those who had chosen surgery in the first year actually pursued a surgical specialty, and of all students, 45% persisted with their original choice.

Effect of first-year primary care choice/assignment on residency choice. The impact of the apprenticeship experience in the first year on the eventual career choice was studied by relating four categories of assignment possibilities with eventual residency choice of primary care. These assignment categories were: 1) primary care first choice and also assigned; 2) primary care first choice but not assigned; 3) assignment to primary care in spite of this not being the student's first choice; and 4) primary care not first choice and primary care not assigned.

Table 3 shows the numbers and percentages of students in these four categories and how their eventual residency selection related to that of their first-year choice/assignment combination with respect to primary care. A higher percentage of primary care residency choice was made by students whose first choice in the freshman year had been primary care, regardless of assignment (62.1% and 63.9%), as opposed to those whose first choice had not been primary care but who had either been assigned to a primary care apprenticeship (53.7%) or not assigned to primary care (42.7%). Difference among the four categories was significant ($p < 0.001$, X^2). On multiple logistic regression both the first choice as well as the assignment were significant predictors of eventual residency choice.

Discussion

We wished to determine whether or not there was a correlation between the residency and first-

TABLE 3
FINAL CAREER CHOICE RELATED TO CLINICAL FIRST-YEAR ASSIGNMENT IN PRIMARY CARE FOR GRADUATING CLASSES 1982-1991

First year clinical apprenticeship (Choice vs. assignment)	Primary Care n(%)	Final career (residency) choice Other n(%)	Total n(%)
1. Primary care first choice and and first choice assigned.	417(62.1)	255(37.9)	672(100%)
2. Primary care first choice, but first choice NOT assigned.	85(63.9)	48(36.1)	133(100%)
3. Primary care NOT first choice but assigned to primary care, anyway.	122(53.7)	105(46.3)	227(100%)
4. Primary care NOT first choice and NOT assigned.	315(42.7)	422(57.3)	737(100%)

year choices of medical students, as well as any trend in choice of primary care specialties based on gender and year of graduation from medical school. Table 1 shows that 45.5% of all entering medical students for all years combined chose primary care disciplines, and this increased to 53.1% as graduating medical students (NS, $p = 0.41$). Obviously, first-year choices may not always have reflected the students' preferences but rather their desire to have a far different experience than their intended eventual practice choice. Realistically, residency choices were affected, not only by the graduates' preferences, but by the availability of residency positions throughout the United States.

There is remarkable agreement between Table 2 and the choice versus assignment categories in Table 3, in that 62.4% of the same students who chose a primary care assignment in the first year at the University of Kansas School of Medicine also chose a primary care specialty on graduation, regardless of their choice/assignment category in the first year (62.1% and 63.9%, respectively). Assigning students to primary care in spite of their not choosing it appeared to have some effect on ultimate residency choice (53.7% versus 42.7% of those not assigned to primary care). Further, it should be noted that one cannot depend on year-to-year trends in specialty choices. One needs to observe the pattern over a five- or 10-year period for greater accuracy. This is particularly appreciated in Figure 2, which displays a marked gender trend difference in choice of primary care over 10 years.

With efforts to encourage more interest in primary care among U.S. medical students, medical school faculty need to consider realistically how much change they can effect. As already noted, there are many and varied reasons for medical graduates' choice of specialties, some probably intertwined with their decisions to go into the medical profession in the first place. This should be considered by committees for medical school admission. For the most part, the medical school curriculum appears to serve as a useful conveyance to help students reach their professional goals.³ In addition, the financial status of individual students must be reckoned with, along with the status of the general economy.

Our findings suggest that many medical students may already have decided on their career choice as they entered medical school. For the majority of them, the medical school first-year

clinical curriculum appears to have had little or no effect on their decision, and faculty encouragement of a specialty may be less important than the students' own goals and preferences. On the other hand, assigning students to primary care when it was not their first choice appears to have affected the decision to choose a primary care residency (53.7%), as compared to those who were not assigned to primary care (42.7%). So over half the students from this medical school, including many of those not interested in primary care initially, decided to specialize in primary care.

It may be speculated that the declining trend in selection of primary care by men as contrasted with women has an economic basis. Beyond the possibility of greater interest in technical specialties by men, it is probable that men are more likely to seek a higher income in the practice of medicine than women and probably more likely to have the greater income in two-income families.

Finally, one must consider the facts that women were clearly more interested in primary care medicine than men in the first year of medical school (52.5% versus 42.6%) and in the choice of residencies during the fourth year (60.6% versus 50.0%), and that their interest in



Figure 2. Trends in total primary care residency selections by year of graduation and by gender.

primary care was steady over the period 1982 to 1991, as compared to the declining interest by men at the University of Kansas (Figure 2). Taken at face value, this suggests that admitting a greater percentage of women to medical school might provide a greater number of primary care physicians. Whether or not the contemplated changes in America's health care system will force more men into primary care disciplines, one might speculate that an even greater percentage of women will choose this practice option in the future.¹⁵

Conclusions

We have analyzed data of specialty choices of 1,769 medical school graduates according to gender from classes 1982-1991, from the University of Kansas School of Medicine in their first and fourth years in the medical school curriculum with special reference to primary care specialties. Almost half of all students chose a primary care specialty on admission (45.5%), and over half on graduation (53.1%). Both the students' first choice of specialty as well as the specialty assignment were significant predictors of eventual residency choice. Though the trend of selection of primary care specialties by women over time was stable, there was a significant decline in primary care selection by men over the 10-year period reflecting the decline noted generally in the U.S. in the past three decades.¹⁵

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Hemophilia and AIDS in Kansas

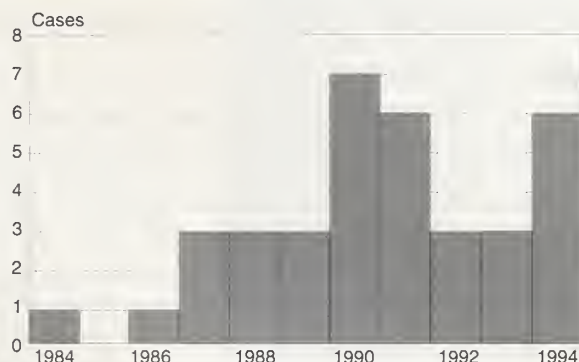
Hemophilia is an X-linked recessive disorder in which there is a defect in some of the blood coagulation factors. In general, women carry the trait and men have the clinical disorder. New mutations account for about one-third of cases. The incidence of hemophilia is approximately one per 7,500 males.

In Kansas, there are an estimated 163 persons with hemophilia. The hemophilia nurse coordinator in the Department of Health and Environment (KDHE) currently provides services to over 100 of these persons and their families.

Nationwide, more than 50% of hemophiliacs who received factor replacement therapy before the mid-1980s became infected with HIV. The first Kansas case of AIDS reported in an adult with hemophilia was diagnosed in 1984. The first reported pediatric case was diagnosed in 1991. Thirty-six cases have been reported to KDHE as of mid-1995. Twenty-two (61%) of those cases are known to have died. Twenty-two (61%) of the hemophiliacs with AIDS in Kansas lived in the Kansas City or Wichita metropolitan areas.

The age range at time of diagnosis for hemophiliacs with AIDS in Kansas is 13 to 60 years, with a median age of 31 years. Of the Kansas AIDS cases with hemophilia, 81% are white. The number of cases diagnosed year by year is shown in the figure. Common diagnoses of Kansans with hemophilia and AIDS have been the wasting syndrome (39%), pneumocystis carinii pneumonia (25%), esophageal candidiasis (19%), and cryptococcosis (11%).

The management and treatment of hemophilia have undergone significant changes with advances in factor replacement products, genetic evaluation, surgical options and home therapy. Hemophilia treatment centers (HTCs) offer comprehensive medical care to persons with hemophilia. Because Kansas does not have an HTC, Kansans with hemophilia rely on out-of-state centers. To increase access to hemophilia



Hemophiliacs with AIDS by year of diagnosis: Kansas, 1984-1994.

care, Nebraska and Missouri HTCs provide ongoing outreach clinics in Kansas.

Eligibility for the state hemophilia program is determined through application to KDHE. Those meeting financial eligibility criteria receive factor replacement therapy and an annual comprehensive evaluation at a hemophilia treatment center. Improvements in donor screening and manufacturing processes have made factor products free of HIV since the mid-1980s. Further information about hemophilia can be obtained by contacting the hemophilia nurse coordinator at 913-296-8024. Additional information on AIDS can be obtained from the AIDS epidemiologist at 913-296-5587.

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Reported by A. Mehrhof, R.N., M.S.; and K. Tappan, M.P.A., AIDS Section, Bureau of Disease Control, Kansas Department of Health and Environment.

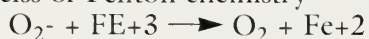
Does Iron Cause Atherosclerosis?

DAVID G. MEYERS, M.D.,* *Kansas City*

The lower incidence of atherosclerotic cardiovascular disease in women has never been adequately explained. Frequently advanced is the argument that estrogen-induced changes — perhaps of lipids — are operative, and that these protective changes may be lost at menopause. Yet, estrogen clearly increases cardiovascular mortality in men. Appearing first in 1976, several not-widely-appreciated reports from the Framingham cohort have shown that the risk of heart disease in women is increased equally by natural menopause, simple hysterectomy or hysterectomy with bilateral oophorectomy.

In 1981, Sullivan first proposed the so-called iron hypothesis, suggesting that iron depletion through regular menstrual blood loss protects women against heart disease.¹

The iron hypothesis is biologically plausible. Oxidized low-density lipoprotein cholesterol (LDL-C) appears to be the lipid moiety most responsible for atherosclerosis.² LDL-C becomes oxidized when it comes in contact (in the absence of antioxidant enzymes, vitamins and other proteins) with free radicals such as hydroxyl radical (OH), oxygen radical (O₂⁻), or peroxy radical (H₂O₂⁻). Reactions known as Haber-Weiss or Fenton chemistry



change poorly reactive free radicals, such as hydrogen peroxide (H₂O₂), into highly reactive ones, such as hydroxyl radical (OH), using iron as a catalyst.³

Atherosclerotic lesions are rich in iron, and the gruel from these lesions is able to induce lipid peroxidation, a reaction inhibited by the iron chelator desferrioxamine. Similarly, susceptibility to oxygen reperfusion damage can be diminished by desferrioxamine.

Several epidemiologic studies have found associations between indicators of body iron sta-

tus (hemoglobin, serum iron and serum ferritin) and both cardiovascular events and mortality. In men and women, hemoglobin and hematocrit correlate positively with coronary artery disease. The Nutrition Canada Survey noted a direct association between serum iron and fatal myocardial infarction, but no association with either dietary or supplemental iron.⁴ Salonen and associates,⁵ in a paper which has evoked much controversy, reported a two-fold increase in risk-factor-adjusted risk of acute myocardial infarction among 1,931 Finnish men with serum ferritin levels >200 mg/l, as compared to men with lower levels of serum ferritin. The presence of carotid atherosclerosis is also strongly predicted by serum ferritin.

Conflicting with these observations are several other studies which found no relationship between iron and atherosclerosis. Iron overload resulting from hemochromatosis or multi-organ hemosiderosis is not associated with an increased prevalence of coronary artery disease.⁶ Nor have associations been seen in two very large prospective cohort studies.^{7,8} These studies measured iron intake — a poor indicator of iron status. Others have noted a lack of association with transferrin and with serum ferritin.⁹ Recently a large prospective cohort study of 2,026 Icelandic men and women followed over 8.5 years found that iron, hemoglobin and serum ferritin did not contribute to the risk of ischemic heart disease.¹⁰

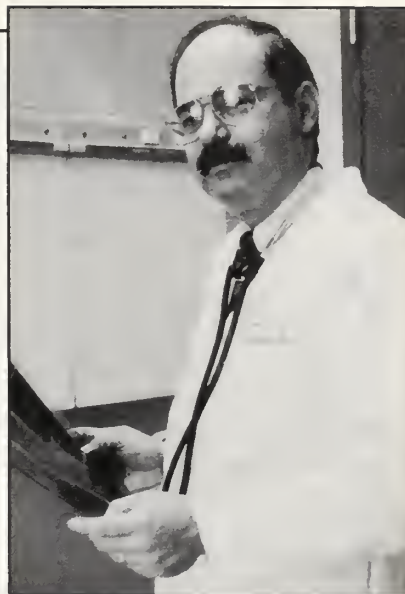
If the iron hypothesis is correct, what are the implications? First, of course, it would explain, at least in part, the lower prevalence of atherosclerosis in women. Pre-menopausal women have serum ferritin levels less than half those of men. These levels rise with cessation of menstruation. The iron hypothesis might also suggest that cyclic post-menopausal hormone supplementation with continued menstruation might be more effective than non-cyclic post-menopausal regimens. Last, blood donation, with its 250-mg iron loss, might have health benefits to the donor. Donating a single unit of whole blood lowers serum ferritin levels in men, almost to the levels found in post-menopausal women. No further decrease occurs with additional donations.

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At present, while appealing, the iron hypothesis is unproven, and we must await large prospective cohort and clinical trials.

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Gastric Duplication Cysts

JAMES T. HARRIS, M.D., AND RICHARD A. AHLSTRAND, M.D., * *Wichita*

An asymptomatic 45-year-old female with known uterine fibroids presented for a follow-up pelvic sonogram. A left perineal mass was incidentally identified. The patient's physical examination was unremarkable, and serum electrolytes were normal. There was no significant abnormality on her complete blood count.

Imaging Findings

The ultrasound examination demonstrated a 3.7 x 5.2 cm hypoechoic mass, with a thin hyperechoic rim, adjacent to the superior aspect of the left kidney (Figure 1). A subsequent abdominal CT revealed a 5 x 6 cm, low-density mass in the left upper quadrant, which appeared separate from the adrenal gland (Figure 2). At laparotomy, a benign gastric duplication cyst was removed.

Discussion

Enteric duplication cysts are rare, although they may occur anywhere along the alimentary tract. The most common site is the ileum, followed by the esophagus, jejunum, colon, stomach and appendix.

Gastric duplication cysts usually manifest as asymptomatic, upper-abdominal masses. They tend to have a smooth coat, contiguous with the gastric wall. The inner lining is composed of alimentary epithelium, which is not always gastric in nature, but may resemble the lining of the small bowel or colon. The mucosal lining sometimes produces enzymes and hydrochloric acid, which can lead to symptomatic ulceration and fistula formation. Gastric duplication cysts may also contain ectopic pancreatic tissue, or communicate with the pancreatic duct, resulting in recurrent pancreatitis.

Sonographically, gastric duplication cysts appear as anechoic or hypoechoic cystic masses.



Figure 1. Ultrasound examination. The 3.7 x 5.2 cm gastric duplication cyst (1) is clearly seen, although the hyperechoic rim is not well visualized in this view. It is adjacent to the superior aspect of the left kidney (2) and slightly separated from the spleen (3).



Figure 2. Contrast-enhanced CT examination. The dark gastric duplication cyst (1) is visualized posterior to the stomach (2) and medial to the spleen (3). The adrenal gland (4) appears separate from the cyst.

The peripheral rim of smooth muscle tissue is anechoic, while the internal mucosal lining produces a thin, echoic layer. CT appears superior to

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(Continued on page 184.)

The Doctor-Patient Relationship

ARTHUR E. HERTZLER, M.D.

The intimate contact between doctor and patient as here set forth is passing. The sphere of influence of the family doctor is being wiped out by regimenting medical practice as we find it in the hospitals and clinics. It is wholly obliterated by contract practice and politically controlled institutions. It is possible to regiment organic disease, perhaps, but the more intimate touch between doctor and patient cannot be so controlled. That is a growth in years. It is as impossible as to have our intimate friends selected by proclamation.

Certain kinds of suffering react better to a doctor whom the patient knows and respects. This is particularly true of those cases where grief and bereavement enter the picture. These patients will tell their family doctor intimate things, where they would be mute before a hospital interne. This is true of all complaints of nervous origin, or that have a strong nervous element except, of course, in the case of those neurotics who specialize in complaints and enjoy ill health. That the personality of the doctor is an important element is proved by the fact that medicine prescribed by a young assistant may produce no favorable result but the same medicine prescribed in a slightly different form, by a long-known doctor, may produce happy results. Silly, perhaps, but people are like that.

A great difficulty still confronts doctors and concerns vitally the patients. The science of medicine has made advances almost or quite beyond conception. The science becomes an art when applied to the treatment of the sick. Artists differ in capacity. The medical art available to any one person depends on the capacity of the one practicing the art. That is the task now, to assure the greatest capacity of the individual practitioner. Certainly the ultimate will not be achieved if either the boss of the factory or a political boss is allowed to select the doctor. Efficiency can be hoped for only if the patient is allowed to select his own doctor. The science of medicine is abstract, the relation of doctor and patient is something else.

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Malnutrition in the Elderly

DANIEL L. SWAGERTY JR., M.D., M.P.H.*

Case History

An 82-year-old white female presented for follow-up of atrial fibrillation on digoxin 0.25 mg each day, her only medication. She was last seen 6 months previously and was in good health, but had since lost 20 pounds. Her son had died shortly after her last visit, a subject on which she lingered during the interview. She related being sad and tearful most of the time. The daughter who accompanied her was concerned about her mother's increasing isolation and weight loss. She also related a two-year history of her mother being more forgetful and less motivated. These symptoms had become much worse after the death of her son.

The patient lived alone in an elder high-rise and got along well with the support of her daughter and two daughters-in-law. There was a congregate meal program in the apartment building, but the patient had never participated and refused to do so. The family prepared meals and delivered them to the patient, but frequently noticed they were not eaten. They also took her on grocery-shopping trips to select foods of her preference, but again, much went uneaten. The patient had been invited to live with her daughter, but refused to leave her own home and was insistent about remaining independent.

Her physical examination revealed a weight of 115 pounds and a height of 5 feet 5 inches tall. Vital signs were unremarkable. Physical examination revealed her to be edentulous with well-fitting dentures. No oral lesions were present. There was early temporalis muscle atrophy. Heart sounds were irregular/regular with a soft I/VI systolic murmur. Fat stores seemed diminished with some muscle atrophy. Neurologic examination indicated short-term memory loss, but no focal neurologic deficits. All other physical findings were normal.

Laboratory studies showed her serum electrolytes, BUN, creatinine, glucose, TSH, T4, and hematologic profile to be within normal lim-

its. Serum albumin was 3.5 and total cholesterol was 150. Digoxin level was 1.8. An electrocardiogram showed atrial fibrillation with a rate of approximately 80.

Her digoxin dose was reduced to 0.125 mg/day, and she was scheduled for follow-up two weeks later. Home health care was ordered with a nurse and social worker scheduled for an initial visit the next day.

Discussion

This patient is malnourished and at tremendous risk for further nutritional compromise if interventions are not provided. The prevalence of malnutrition among the elderly can be as high as 40% in outpatients, 60% in the hospitalized, and 80% in nursing home residents. There are multiple risk factors for the development of poor nutritional status in older people. Malnutrition places older people at risk for excess morbidity and mortality, much of which can be reversed with intervention.

The etiology of nutritional compromise is often multifactorial and spans a wide gamut of psychosocial and biomedical problems. A classification adopted from White, et al. is provided in Table 1. Inappropriate diet, poverty, isolation, and functional impairment all play a role in inadequate food intake. A common pathogenic etiology is strict compliance with a prescribed diet (e.g., low salt, low fat, low cholesterol). Dysphagia, the inability to feed oneself, and immobility are also important causes of malnutrition. Medication use, acute and chronic disease, and age-related physiologic changes are involved in most elderly who become undernourished.

Identifying risk factors that contribute to malnutrition in the elderly is the first and most important aspect of assessment. This patient demonstrates how more than one factor usually plays a role. She was socially isolated, refused an available food assistance program, and was reluctant to accept additional family support. In addition, depression and dementia were apparent and in need of further evaluation. She was taking digoxin, which often causes anorexia in the

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TABLE 1
RISK FACTORS ASSOCIATED WITH POOR NUTRITIONAL STATUS IN OLDER AMERICANS³

Inappropriate Food Intake	Poverty	Social Isolation
Meal/snack infrequency	Low income	Support systems
Quantity/quality	Food expenditures/resources	Availability
Milk/milk products	Economic assistance program reliance	Utilization
Meat/meat substitutes	Food	Living arrangements
Fruit/vegetables	Housing	Cooking/food storage
Bread/cereals	Medical	Transportation
Fats	Adequacy	Unavailability of preferred foods
Sweets	Utilization	Dependency/Disability
Dietary modifications	Acute/Chronic Diseases or Conditions	Functional status
Self-imposed	Major organ system disease	Activities of daily living
Prescribed	Constipation	Instrumental activities of daily living
Compliance	Abnormalities of body weight	Disabling conditions
Alcohol abuse	Cognitive or emotional problems	Lack of manual dexterity
Chronic Medication Use	Bereavement	Use of assistive devices
Cost	Depression	Inactivity/immobility
Prescribed/self-administered	Dementia	Age-Related Physiologic Changes
Polypharmacy	Anxiety	Decreased demand
Nutritional supplements	Oral Health Problems	Decreased metabolic rate
Quackery	Bad oral hygiene	Decreased activity
	Poor dentition	Hypodipsia
	Ill-fitting dentures	Decreased enjoyment
	Decubitus ulcers	Taste
	Sensory impairment	Smell
		Vision
		Decreased feeding drive
		Increased satiety

elderly, even at therapeutic levels.

Assessment

After identifying potential risk factors for malnutrition, other data may help establish the diagnosis. The most important indicator is a downward trend in weight. An involuntary weight loss of greater than 1% during the past week, 5% during the past month, or 10% during the past 6 months is indicative of malnutrition. An overall body weight of less than 90% of ideal is also such a marker. This patient was at 85% of her ideal body weight after a 15% weight loss in 6 months.

Biochemical indices are also useful in the evaluation of malnutrition. Although serum albumin has been considered the "gold standard" in evaluating malnutrition, it cannot be used alone. Many older persons who are "subclinically" malnourished have serum albumin levels within the normal range. Weight loss or low body weight is frequently more apparent in these individuals. Certainly, a serum albumin level below 3.5 g/dl indicates malnutrition. In frail older patients, an albumin level less than 4.0 g/dl may represent malnutrition. In addition, a low total cholesterol (i.e., 160 mg/dl) indicates malnutrition.

Intervention

The key to intervention is to start early, even before completion of the workup. Specific nutrition-promoting interventions vary but usually include increasing protein intake to 1 to 1.5 g/kg/day and calorie intake to greater than 2,000 kcal/day. A goal for optimizing adequate intake is 35 kcal/kg/day. If this is unattainable with a regular diet, supplementation is necessary. The specific type of formula is less important than providing a good source of protein and calories. Novel foods such as milk shakes, candy bars, and peanut butter sandwiches have been useful in addressing anorexia and re-establishing adequate intake. An increase in fluid intake should also be prescribed to reach a well hydrated state.

A more active and independent life style should be promoted. Exercise is important to promote appetite, increase activity, and avoid constipation. Fluid intake and dietary sources of a laxative should also be suggested as a means to maintain regular soft stool.

A home visit by a home health care nurse and social worker is often useful in the evaluation and treatment of malnutrition. This patient had ade-

quate food available in her home, as well as appropriate facilities to prepare meals. She continued to refuse to attend the congregate meal site, but was willing to go to the families' homes to eat meals several times a week. A water prescription (2 quarts of fluid per day) was given, and a reminder sheet placed on the refrigerator to help her keep track of fluid intake. She agreed to participate in group therapy to address her bereavement. At that time, it was thought antidepressants were not warranted and could potentially make matters worse through increased confusion, xerostomia, or anorexia. At her two-week follow-up appointment, her weight was 121 pounds. She was in better spirits, and her appetite had improved after the change in the digoxin dose. The patient remained committed to maintaining her own apartment, and the family was less concerned about allowing her to do so. Plans were made to follow her closely in the clinic and through home health care.

Summary

Several factors place older patients at risk for malnutrition, including physiologic effects of aging, chronic medical disease, psychiatric disease, various psychosocial problems, and effects

of medication. Many of these factors are reversible but require early recognition and assessment.

Cholesterol and albumin measurements may help confirm a diagnosis of malnutrition, but the most important indicator is weight loss. The primary interventions for nutritional compromise are increasing calorie, protein, and fluid intakes. Nutritional supplements may need to be prescribed for repletion and maintenance. Other nutrition-promoting interventions include exercise, avoiding constipation, and dental care.

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(Continued from page 180.)

other imaging modalities because of its clearer delineation of anatomic structure.

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Whither Thou Goest: A Story of Dedication

Whither Thou Goest...I Will Go, by Grace Foege Holmes, M.D. (Fairway Press, 1992); 240 pages, illustrated, paperback.

This is a personal account of the life and times of Grace F. Holmes, M.D., Professor in the departments of Pediatrics and Preventive Medicine at the University of Kansas School of Medicine-Kansas City; and her husband, Fred F. Holmes, M.D., the Edward Hashinger Distinguished Professor of Medicine and Gerontology at KUMC.

The book's title is taken from the biblical Book of Ruth (1:16-17), in which Ruth tells her mother-in-law, Naomi, who is returning to Bethlehem following the death of her husband and two sons, "Intreat me not to leave thee, or to return from following after thee: for whither thou goest, I will go; and where thou lodgest, I will lodge; thy people shall be my people, and thy God, my God: where thou diest, I will die; and there will I be buried: the Lord do so to me and more also, if ought but death part thee and me."

The title is apt, for the couple spent the first part of their medical career as Lutheran missionaries. The story begins when they met as students at the University of Washington School of Medicine, Seattle, in 1953. They married in June 1955 and came to the University of Kansas Medical Center for their internships. Grace and Fred were strong in their Lutheran faith, and both had pastors and missionaries among their relatives. They decided to enter the missionary field upon completion of their internships.

In 1960, after training in tropical medicine and instruction in the Hakka Chinese dialect, they went to their first post in Malaya, where they organized a clinic and adopted two Chinese children, Heidi and Cindy. Grace states that although Cindy suffers from the complications of kernicterus, she has been a blessing to her family and all who encounter her.

In 1963 the couple and their family returned to KUMC-KC, Fred to a residency in internal medicine, and Grace to a fellowship in child rehabilitation. During this time Grace initiated

the Kansas Infant Development Screen (KIDS), now very well recognized and used worldwide. After a three-year wait due to red tape in Malaya,

they added a third Chinese baby, Lisa, to their family. In 1967 Teddy joined the Holmes family, again by adoption. In 1968 Grace gave birth to Julia — after a potentially fatal thrombophlebitis with pulmonary embolus.

In 1970 the Doctors Holmes and their family again entered the medical missionary field, this time to serve at the Kilimanjaro Christian Medical Centre south of the famous Tanzanian mountain. Here they taught Tanzanian medical students and paraprofessional personnel so they could take over the work. Unfortunately, the Holmes family was forced to leave the country in 1973 due to the political climate and to family concerns. They returned to positions at the KU Medical Center in Kansas City, where they added a sixth child, Andrew, and have remained until — well, the book was published in 1992; however, as Grace writes about their contemplating the right time to retire, the book ends with Fred saying:

"Gracie, I have a great idea! I've been doing some thinking and this seems the right thing to do. Let's go back to Africa and do some medical work there for a few years before we really retire. What do you think?"

"Now, [writes Grace] what could I say, but 'Super idea, Fred. Sure, let's do it.'"

I am certain that the last part of Ruth's statement also expresses the intent of the Doctors Holmes: "If ought but death part thee and me." The book is illustrated with sketches and photographs of the family at various stages of their lives and work. It chronicles the religious, medical, political, professional and personal life not only of the mission areas they served, but also of our country.

Dr. Grace Holmes has presented a very personal journal of the life, times and trials of a dedicated wife, mother, physician, missionary and Christian. Although she has gone through many

(Continued on page 187.)

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BOOK REVIEW

(Continued from page 186.)

of the same personal, professional, marital and family problems that others have also faced, her abiding faith shines through, comforting, supporting and strengthening her and her family through all the trying periods of their life together. At a time when personal, professional and family values sometimes seem almost nonexistent, this book is a refreshing ray of hope and trust in God as expressed by two devout Christians. Friends and colleagues have probably heard many of the incidents related in the book. But for those of us who have not had the pleasure of knowing the Doctors Holmes, this is a book worth reading and keeping.

Warren E. Meyer, M.D.



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ABOUT OUR LOGO

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laennec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

After a particularly severe winter this year (notwithstanding all the talk about global warming), we are happy to feature a garden of spring and summer flowers — ardently hoping that a bunch of them will soon be blossoming in real profusion.

Driving past El Dorado Lake on the Kansas Turnpike in January, we observed snow piled around the bottoms of dead tree branches that stuck out of the frozen surface. They reminded one of a large bunch of chocolate kisses with long brown tails. The realization of what they truly were brought on a sudden wish for a short, short winter and an early spring. Now that it's arrived, let's hope it's here to stay!

This month's cover again features the work of Wichita native Stephen J. Miner, a cum laude graduate of the Wichita State University with a degree in fine arts. We last featured Mr. Miner's work on the cover of the March 1994 issue, a painting of apple blossoms. Mr. Miner attempts not only to represent the real form of nature, but also to capture its dynamic spirit. We think you will agree that he has done both very capably in this cover.

So farewell, Winter. Hello, Spring!

SCHOLARSHIPS FOR PHYSICIANS

Scholarship funds are available, through the Earl L. Mills Educational Trust, to qualifying Kansas physicians for study in medicine or health care lasting 4 to 12 months at an approved institution. Applicants must have practiced continuously in Kansas for at least 5 years and may not be a member of a group of participating physicians larger than 5.

In addition, the Mills Trust provides funding for educational seminars in Sedgwick County, Kansas, which support postgraduate medical opportunities for practicing physicians.

The deadline for applications is July 31, 1996. Write the Earl L. Mills Educational Trust, INTRUST Bank, N.A., Attn: Carolyn A. Parmer, P.O. Box One, Wichita, Kansas 67201-5001.

Who'd a Thought?

Technology has burgeoned in recent years, and television and the computer have changed the practice of medicine. Doctors have faced the changes and adapted to many of them as they have arrived and their value has become known. Not all innovations prove worthy, however. Some, such as gastric freezing, gastric stapling, the gastric balloon, pneumoencephalogram, etc., have quietly disappeared.



One recent techno-advance is telemedicine, perhaps a natural extension of electronic commercialism. Electronic shopping, banking, securities trading, travel arrangements, and a host of other activities have been made available to the public without having to leave one's home or work place. Now telemedicine has arrived, offering the "best" physicians for consultation and treatment. The *Wall Street Journal* on January 17, 1996, ran an article on this subject called "Hold the Phone." In it, past KMS President Dr. Richard Meidinger was quoted regarding some proposed curbs on its use in Kansas.

The first three paragraphs of the article set the stage and gave readers some idea of what telemedicine is:

In a small room here at the University of Kansas Medical Center, Gary Doolittle chats with a patient, checks her heart and lungs with a stethoscope and then asks her to step behind a screen and disrobe.

A common exam, done in a most unusual way: the patient is in Hays, Ks., nearly 300 miles away. Dr. Doolittle, a 37-year-old oncologist, can examine patients across the state with gadgets like two-way television, electronic stethoscopes, and long distance X-ray transmission.

It is called telemedicine, and to Dr. Doolittle, this is the "perfect use of the technology....Patients are getting the same kind of care they'd get if they were sitting next to me."

Arthur Caplan, professor of bioethics at the University of Pennsylvania, is also quoted in the article and states, "Technologically, telemedicine is already here." He later admits that overcoming the economic barriers "may take 20 years."

As usual, from the reporter's point of view, the opposition to this new "marvel" represents a turf battle among physicians as well as an economic threat to them. However, many insurers do not

at present cover telemedicine and appear reluctant to do so. Many lawyers are concerned about the malpractice possibilities, as well as issues regarding privacy — especially in the area of HIV-positive patients.

The article is worth reading. Every advance in medicine has been both a blessing and a curse, depending on how the particular innovation was used. Penicillin was supposed to rid the world of infections once and for all, yet more and more resistant strains of bacteria continue to demand new and better antibiotics to eradicate them. Gastric freezing was to be the end to ulcer disease, yet the complication rate was prohibitive. Other similar examples can be found. It is highly possible that charlatans and quacks will take advantage of the new technology for their own personal gain — against the best interests of patients.

Another thing that bothers me about telemedicine is the problem of preserving the doctor-patient relationship. Clearly, in Dr. Doolittle's case it is a convenience that spares both doctor and patient much travel time and saves the patient considerable expense in getting a check-up. Furthermore, this is Dr. Doolittle's patient, one he has already seen in the flesh, and treated. He is a licensed Kansas physician. Such an arrangement would be considered a good use of this tool.

My concern is for the Kansas patient "seen" and treated by an out-of-state practitioner — and I don't believe my scenario is far-fetched. What recourse does that patient have if something untoward happens? Can that out-of-state doctor be held responsible? Should one be allowed to practice in a state where one is not licensed? State licensure boards were established to protect the public from fraudulent and unscrupulous practitioners, and to make sure that proper recourse was available for wronged patients. Is it not logical that those who would profit from such technology should be licensed to practice medicine in the state in which they practice, and submit to the regulations set by that state for similar practitioners?

The Kansas Medical Society has proposed amendments to the Healing Arts Act dealing with the interstate practice of medicine. One amendment would add to the list of persons not

engaged in the practice of medicine, to include: "Practitioners of the healing arts licensed in another state, whose professional services are performed in consultation with a practitioner who is licensed under this act, and who do not maintain an office or place to regularly examine or treat patients or to receive calls within this state."

KMS proposes to add under the section dealing with exceptions to the practice of the healing arts this addition: "(b) For the purpose of this act, each person, regardless of location, who performs for COMPENSATION any diagnostic or treatment services through the use of any medium, including an electronic medium, on an individual located in this state, shall be deemed to be engaged in the practice of the healing arts in this state and shall be required to be duly licensed except as otherwise provided by this act."

I admit to being an old dinosaur. Having a patient to see, question and examine in the flesh is still the best way, in my humble opinion. I know, however, that younger physicians who have grown up with television and the computer and use it regularly may feel differently and see this new technology as just another advance in medical treatment.

It might well be asked, does the concept of the physician-patient relationship still have any meaning? Is it still relevant in an age of depersonalization? I hope it is still one principle that the profession stands fully behind, because I think if it is swept away by the new electronic age, the profession and humanity as a whole will suffer.

This is not a turf issue; it is not an economic issue; it is not a jealousy issue. It is an issue of what is best for the patient — and that must concern every physician in Kansas. **W.E.M.**

Information for Authors

Manuscripts must be typewritten, double-spaced, leaving wide margins. The original plus one copy should be submitted. Manuscripts are received with the explicit understanding that they are not simultaneously under consideration by any other publication. Publication elsewhere may be subsequently authorized at the discretion of the editor.

Brief, concise **articles** are preferred; an ideal manuscript will not exceed five double-spaced pages. All material will be edited by the editorial staff to assure clarity, good grammar and appropriate language, and to conform to KANSAS MEDICINE style and format. When feasible, material may be condensed.

The author will be asked to review the **galley proof** prior to publication. Although editing and proofreading will be done with care, the author is responsible for accuracy of material published. The galley proof is for correction of **ERRORS**; rewriting of material *must* be done prior to submission. Authors are urged to check manuscripts and galley proof carefully for errors that could result in inaccurate information.

Drugs should be referred to by generic names; trade names may follow in parentheses if useful. All **units of measure** must be given in the metric system.

KANSAS MEDICINE will print a maximum of **ten references**. All references should be keyed with superscripts in the text in the order cited. If more than ten sources are cited, readers will be referred to the author for the complete list.

Illustrative material must be identified by its referral number in the text and be accompanied by a short legend. **Photos** should be black-and-white glossy prints. **Tables** should be self-explanatory and should supplement, not duplicate, the text.

KANSAS MEDICINE will assume the cost of black-and-white figures and tables for two units. A unit is defined as 1/4 page. The author(s) will be billed for additional units at cost.

A **reprint** order form with a table showing estimated cost will be sent with the galley proof. Reprints must be ordered by the author through KANSAS MEDICINE, and will be billed to the author following shipment.

Working Together to Make Our Future a Reality

Last May the theme for the KMS Annual Meeting was "Facing the Future Together." In my address to the House of Delegates, I spoke of challenges and frontiers that we were facing, and I proposed some mechanisms for working together to arrive at the best solutions for problems and changes facing Kansas physicians. We have implemented some of these areas, and others have been explored and developed as the environment has changed in the past year.



One of our primary objectives has been to explore ways that we can improve communication amongst physicians so that the physician community can truly have an understanding of each other's issues and thereby be willing to work together as a unit to solve problems. To initiate some of this dialogue, we formed an interspecialty council which met and discussed problems facing each of the respective specialties. Interestingly, many of the issues which each group thought were unique to their own specialty actually involved large segments of Kansas medicine. To have all physicians come to the table and work toward solutions was most beneficial.

Along the same lines, the Task Force on Practice Issues dealt with the topics of mid-level practitioners and how "scope of practice" and "supervision" affect the delivery of quality-care medicine in Kansas. Input on this task force was received from all specialties, and further understanding and cooperation amongst Kansas physicians was achieved.

The western Kansas office, situated in Hays, is rapidly becoming a reality. Staff and location have been selected, and the opening date was set for April 24. I am most pleased with the support I have received — from across the state — in this effort to extend the KMS presence into western Kansas. We hope this will be only the beginning of such outreach efforts of the Kansas Medical Society to maintain communications and promote the "community of physicians" as truly being all the physicians within the four borders of our state.

We have reactivated the KMS/KUMC Liaison Committee and are most pleased with the response to the initial meeting. Issues of common concern were discussed, and ways that KU and KMS can assist one another were explored. The participants from both groups were enthusiastic and voted to continue with regular meetings four times a year.

The legislative battles are ongoing. This year we have met with many groups representing different types of practitioners. With some we have been able to find common ground and proceed with legislative efforts in a manner we feel will continue to offer quality medical care to our patients; optometry and nurse anesthesia are two of these. With others, we have felt that compromise was not possible because we must always look at the quality of care and work toward protecting that for our patients.

The environment of medicine continues to change. We are seeing many of our physicians across the state, both metropolitan and rural, aligning themselves with large managed care groups. Many physicians are selling their practices to managed care groups or hospitals. As this trend has developed, we have perceived a need for KMS to create a management services organization (MSO) to assist physicians in today's economic world. A feasibility study is in progress on this topic, and a report will be presented to the House of Delegates in May.

This is only a brief summary of some of KMS' activities in 1995-96 and some of my directions as president. What it does not show are the faces and voices of the physicians I've worked with this past year as I traveled across the state — the faces and voices that express love and dedication to the patients of our state and show their eternal commitment to preserving quality care for the people. The physicians of Kansas are truly a very special family, and I thank you for the privilege of serving as President this year.

A handwritten signature in dark ink, reading "Linda D. Warner, M.D." The signature is fluid and cursive, with a long horizontal line extending from the end.

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This Has Been a Great Year, Thanks to You!

What a great year this has been for the Kansas Medical Society Alliance! So much has been accomplished, and many goals have been attained. But the greatest accomplishment is the ongoing relationship between the Kansas Medical Society and the Alliance. My predecessors had related to me this unique relationship between the two groups, but I didn't comprehend what a wonderful working relationship we have.

Dr. Linda Warren and Jerry Slaughter are two of the greatest supporters of the Alliance. Dr. Warren has taken an active role as both an Alliance member and a dedicated supporter. There has been no project the Alliance has undertaken this year in which Dr. Warren hasn't played a major part.

At the beginning of the year, KMS gave the Alliance \$10,000 to be donated to the American Medical Association Education and Research Foundation on behalf of Dr. Linda Warren's campaign for a position on the AMA Committee on Constitution and Bylaws. AMA-ERF is the only philanthropy the Kansas Medical Society Alliance supports on the state level. The money that KMS gave helped us to have a banner year — in fact, we set a record with our contributions.

Our two major statewide health promotion projects were the SAVE program (Stop America's Violence Everywhere) and the bone-marrow donor drive. Dr. Warren purchased SAVE pins for herself, her husband and her entire office staff to wear in support of our SAVE Day. Half of the purchase price of these pins went to AMA-ERF. When approached with the Alliance's bone-marrow donor drive, Dr. Warren discussed this program with physicians she met across the state and also signed up 15 prospective donors through her office in Hanover. This was one of the largest recruitment groups we have had throughout the state.

Our membership has always been a concern of Dr. Warren, and she often asks what she can do to increase our membership. The Kansas Medical Society has over 4,000 members, whereas the Alliance is working hard to maintain a member

ship of 900. So whenever possible, Dr. Warren would praise the work of the Alliance to physicians and urge them to encourage their spouses to join our organization. She understands the strength of having an organization of both physicians and their spouses, since she herself fits both categories.

Dr. Warren is a cherished friend of the Alliance, and she will always be a cherished friend of mine. This year has truly been special due to her support and friendship. I feel very blessed to have served the Alliance at the same time Dr. Warren was President of the KMS.

Jerry Slaughter is also a member of our Alliance and a great supporter of our projects. He, along with his office staff, is always willing to help our members by supplying us with legislative information, health project resources, and space in the office building when needed.

This year we finished a project that has taken years to complete. With Jerry's support, Mary Waxse and Katie Pyle assembled photographs of the Alliance's past presidents. The pictures have been framed and are on display in the KMS Building, where they look great alongside the KMS past presidents' photos. Without Jerry's support, this project could not have been done.

The biggest part that Jerry plays in the success of the Alliance is unselfishly "loaning" Nancy Sullivan to act as our "Executive Director." Nancy is a delight to work with and is so multi-talented! Without her help our Alliance would be only half as effective as it is. Nancy knows every aspect of the Alliance, past and present. She keeps us on target, holds us to our deadlines (which is very hard to do), and keeps us informed of what is happening at the KMS. She is instrumental in planning our board meetings and works very closely with the Alliance in planning the state convention. This year Nancy attended Confluence in Chicago with our county presidents-elect so she could stay up-to-date with AMAA. Nancy is a true friend to our Alliance and is indispensable. We hope she will work with us for many years to come.

(Continued on page 9.)

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Medical Care and the Criminal Law

WAYNE T. STRATTON, J.D.,* *Topeka*

It is the nature of medical care that physicians frequently face life-and-death decisions. On occasion they may be drawn into situations in which wills are contested or the ownership of property is litigated. Since patients often confide in their physicians, others may try to invade the privacy of the doctor-patient relationship. Patients themselves may ask their physicians to provide services that conflict with prevailing laws.



As indicated by the popular press, physicians' involvement with the criminal law seems to have increased. Kansas has recently seen cases in which physicians have been charged with the murder of their patients, or with utilizing their medical knowledge to cause the death of a spouse. Several months ago, a New York physician was found guilty of a homicide as a result of negligent care rendered to a woman.

While past columns have emphasized the importance for physicians of being sensitive to civil liability, little attention has been paid to the possibility of criminal charges that may be filed. Given the nature of the development of the law, one can assume that further involvement of prosecutors with health care may occur. Following is a brief primer on Kansas law as it relates to potential criminal conduct by a physician.

Differences between Civil and Criminal Law

Unlike civil cases, which can be brought by any interested party who has been wronged, the violation of the criminal law requires the prosecutor to pursue the case. Normally, this is the county

or district attorney, but in some areas the city attorney may have some powers to prosecute in misdemeanor offenses. On rare occasions, the attorney general intervenes and assists in the prosecution of a case.

Ordinarily these cases are brought in the district court. A warrant may be issued, and the defendant is brought before a magistrate for a determination of the amount of the bond. A preliminary examination is held in which the court determines whether a crime has been committed and if there is probable cause to believe that it was committed by the defendant. If so, then the defendant is bound over for trial. An information is filed, and the case proceeds to trial.

Various statutory and constitutional protections exist which differ from the civil code. Among these are:

- A requirement that there be evidence to prove the guilt of the defendant beyond a reasonable doubt. This varies from the civil code, which only requires evidence that something is more likely true based on the preponderance of the evidence.
- The right to counsel.
- The right that statements of the defendant may be used against him or her only under certain circumstances.

Notwithstanding these procedural guarantees, the defense of the criminal case can be an overwhelming experience for a defendant. The state has many resources that can be utilized to focus upon an individual's conduct. Needless to say, any person who suspects that they may be a target of an investigation should immediately seek counsel.

Criminal Acts in Health Care

A few crimes are unique to physicians or other health care providers:

- K.S.A. 21-3406 relates to assisting suicide. This is defined as intentionally advising, encouraging or assisting another in the taking of the other's life, which results in a suicide or attempted suicide. While Dr. Jack Kevorkian has successfully avoided conviction in Michigan based on a similar statute, nevertheless physicians should be aware that prosecution is possible in

*KMS Legal Counsel.

Comments made herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas Ave., Topeka, Kansas 66603.

Kansas. However, the Legislature was careful, when it enacted the statute allowing a patient to make an advance determination to withhold or withdraw life-sustaining procedures, to provide that a physician who followed these procedures was not guilty of assisting suicide.

- A physician who knowingly conceals evidence that a patient has revoked his or her advance directive may be charged with a felony under the Kansas Natural Death Act.

- K.S.A. 21-3425 addresses a physician's mistreatment of a patient in a public or private hospital or nursing home. This statute makes it a crime to intentionally abuse, neglect, or treat in an ill manner a patient who is detained or confined and who is physically disabled, mentally ill or mentally retarded.

- K.S.A. 65-6703 defines criminal abortion. Kansas law prohibits performance or inducement of an abortion on a *viable* fetus. "Viable" is defined as a stage in which it is the "best medical judgment" of the physician that the fetus is capable of sustained life outside the uterus without extraordinary means to support its life. Instances in which Kansas allows abortions are when two physicians determine that: (1) the abortion is necessary to preserve the life of the pregnant woman; or (2) the fetus has a severe or life-threatening abnormality. Abortion is also legally acceptable when the woman's physician determines the fetus is not at a viable stage.

- In addition to the criminal abortion guidelines, there are extensive provisions relating to a minor's ability to receive an abortion from a physician. If a physician elects not to give parental notice, he or she must comply with the required reporting provisions. Any deviation from the abortion law's notice or reporting requirements is designated a crime under the laws of Kansas.

- Along with the reporting requirements under the abortion laws, Kansas has imposed other reporting duties upon physicians. It is a crime to knowingly fail to make a report when the physician has reasonable cause to believe that a child, adult resident of a care facility, or any adult unable to protect his or her own interests is being or has been abused. The law requires at least an oral report to be made to the state department of Social and Rehabilitation Services or, in the case of a child in an institution operated by the SRS secretary, the report should be made to the attorney general.

ALLIANCE NEWS

(Continued from page 6.)

As I traveled to AMAA meetings and visited with other state alliance presidents, it became obvious that our relationship with the KMS is indeed special. Very few state presidents are allowed to sit in on the medical society's executive committee and council meetings. I know of no other alliance presidents who travel with the medical society president to speak at council district meetings. Our joint installation of presidents is envied by other states, and our addressing of the KMS House of Delegates is a privilege many other state presidents can't imagine.

All the members of the Kansas Medical Society have made this a special year for me. I have been greeted and supported enthusiastically by the physicians of Kansas. The Alliance is respected by our physicians. I know this relationship will continue in the future, and I must thank the past KMS Alliance presidents for making it so outstanding. Our future looks bright, our organizations are strong, and Kansas will continue to be a leader in organized medicine.

Lisa Barker

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401 City Ave., Suite 820
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Do You Have a Story to Tell?

In "The Rural Voice," a column making its debut on the following page, Dr. Richard Ohmart shares some of his Oakley experiences with us. For many Kansans, neither Ohmart's life style nor his practice style is unique. These Kansans share a spectrum of triumphs, tribulations and convictions that are characteristic of rural medical practice.

Nurturing a rural practice requires a certain Kansan approach. In states such as ours, health care often abides by a common-sense imperative that is rare these days. The current urban-centered corporate ethos of medicine does not hear the rural voice clearly. Capitation, web presence, deselection, teaching physician component and mergers are anemic clichés, concepts that ill serve the demands of health care in remote areas.

Statistics tell us many diverse facts about rural America: rural hospitals seldom make money from Medicare; in 1993, 83% of the nation's land and 20% of its population were rural; Medicare is the largest payer for rural hospitals; etc. These numbers are sterile cant if left to stand alone. They must be accompanied by descriptions and narratives of clinical experience. This is where we need your input. We would like you to tell us about how you solved a clinical problem using your pastoral wisdom, to offer your prairie solutions to sticky social situations or your avuncular advice for recent graduates headed for a rural practice. Perhaps you want to spotlight a little-known scientific or experiential facet of rural medicine.

To stimulate such an effort, we have asked Dr. Ohmart to write the inaugural article. His witty and often poignant columns in *American Medical News* are familiar to most of us. His talent as a raconteur has made Oakley, Kansas the real-life equivalent of Garrison Keillor's Lake Wobegon. We are happy that he has agreed to contribute periodically to *KANSAS MEDICINE*. As you chuckle, ponder or commiserate with him, perhaps your own muse, long in hibernation, will awaken. You too should contribute to *KANSAS MEDICINE*, in rural style. Write to us. You may wish to emulate this example, or you may formulate your own style. The rigors of practice allow little time or energy for organized, intense research and review. But as time permits, unfettered imagination, not bound by grant renewal deadlines, not shackled by departmental program priorities, can germinate ideas unique to private practice or rural health care. There are some fine transatlantic examples of medical inquiry on a low budget.¹ We hope this appeal and Dr. Ohmart's article will stimulate your own contribution and participation. We look forward to hearing from you.

1. Heathcote JA. Why do old men have big ears? *BMJ* 1995;311:1668.

I Practice in the Rural Wilderness

RICHARD V. OHMART, M.D., *Oakley

I recently attended an ALSO course in Denver. For those of you not familiar with all the little devils known as acronyms (all of us?), that stands for advanced life support obstetrics. It is modeled somewhat after the more familiar ACLS and ATLS courses, sponsored by the AAFP, and designed for “rural” physicians. It is the use of the word rural that triggered a series of questions in my mind, questions not new to me and questions many of you have no doubt pondered as well. They begin with “What is rural?”

I believe I practice in a rural area, but I am not certain by whose definition. I have lived and practiced in Oakley since I completed a rotating internship in 1963. The present population of the town is about 2,200 souls, although some might maintain that the soulless in Oakley lower that count somewhat. Logan County, in its entirety, may have a population of 3,000. The surrounding counties and communities are not substantially different. We are predominantly dependent on agriculture for our livelihoods. This certainly would seem to me to be rural, or perhaps remote is a better term.

The nearest community with any supply of specialists is Hays, 90 miles to the east of us — not far by modern reckoning, but more than an evening’s stroll. Yet at the Denver course, designed for rural physicians, the instructors suggested asking our OB consultants to step in and review certain problems with us. Somehow, I can’t visualize one of the already overworked Hays obstetricians spending three hours driving to and from Oakley to offer his opinion — especially if that opinion might be that all was fine, and I just needed to continue what I was doing. Another suggestion was that I alert the local neonatologist if I anticipated problems with a neonate. Our “local” neonatologist is also in Hays, and I understand she will be leaving soon, meaning the nearest neonatologist will be in Denver, 250 miles west of me. Alert him or her? Indeed!

These are not complaints, simply facts which are painfully obvious to those of us who have chosen to practice in such a location. I don’t believe anyone who has not practiced in a similar setting has much of an idea of what medicine, or life, in such a more or less isolated community is. Certainly few CME courses, articles, etc. appear to me to show much inkling of the way I have spent my life.

Second question: Why do I stay here, or more correctly, why have I chosen to stay here through 30 odd (in all meanings of the word) years? The obvious reason is that I have always liked what I do, and that enjoyment has grown as the years have progressed. I wouldn’t imply that there have not been times when I have wanted to leave. In fact, many years ago I went so far as to call the Psychiatry Department at KUMC about the possibility of a residency there. The head of the department, whose name I have now forgotten, called back the next day, asking how soon I could start. That frightened me away — for better or worse I will never know.

But to go further, why do I like my practice? I like the people of Oakley, although I assume they are little different from those of any similar community. I have come to know them, their strengths and weaknesses, and to understand many of the sources of both. I respect their wisdom and opinions, although I sometimes argue long and hard with some who are as hard-headed as I. I have delivered many of them and watched, sometimes wept, as they have grown up. I have seen others go from the strength of their forties to the frailties of their seventies. While not always fun, my practice has always been rewarding, the practice I dreamed of while in medical school.

And there is no reason why it should not be the practice of which I dreamed. During my 32 years here I have been the only physician practicing in Oakley for 10 or so years. That has given me a chance to design both my practice and the patterns at the hospital to conform to my own ideas and desires. The fact that the hospital administrator throughout almost all of my tenure has been the same man, and a good

*Address correspondence to the author at New Frontiers Health Services, 123 Center, P.O. Box 756, Oakley, Kansas 67748.

friend, has been of immeasurable importance in all my decisions, as well. Now that there are other providers working with me (to be more thoroughly covered in the future), I have more free (even off-call) time and can relax with Carol, my wife of 38 years.

When I get away from Oakley and listen to, or converse with, others of you in Kansas and elsewhere, I realize other advantages to my situation. To date I have little contact with managed care, although there are hints and heralds of its imminent arrival. My patients see me because they choose me (Carol says it's because I was the only act in town), not because I am a panel member, or the physician their company chose. When they do call, or ask to see me, I am usually accessible, almost always in an emergency. I know that the others with whom I work provide excellent care, and I can relax knowing that I am not essential. My fantasies about that have been tamed through maturity and experience. Minor hassles, such as parking near my office, safety in the street outside the office or parking lot, and the intricacies of relationships with nurses and ancillary hospital personnel hardly exist. The people of Oakley respect me and are considerate of me and my time, as they are of the other providers with whom I work. I hope we are as considerate of them.

I do not practice in Paradise, however. There are the problems common to most medical practices: lack of time, increasing paperwork, the specter of malpractice, etc. Many of these appear to me to be less stressful here than they might be in a larger community, but I am no more qualified to comment on an urban practice than those I mentioned above are to understand my situation. The questions asked are all answered with the same basic answer: I have spent my life building a practice in Oakley, I like that practice and anticipate that I will continue to enjoy it.

And I have discovered another term for the area in which I practice. I understand that the U.S. government considers any area with a population of less than six persons per square mile as "rural wilderness." Perhaps that describes my locale, but certainly not my life.

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Geriatric Ethics: Responsibilities and Conspiracies, Part I

NINA AINSLIE, M.D.,* WILLIAM BARTHOLOME, M.D.,† AND LINDA WOLTER, M.D.,‡ *Kansas City*

Case: Mr. E.F. is a 79-year-old man seen for evaluation of slowly progressing cognitive decline and personality change. His family reports memory impairment, unrealistic fears, and agitated behavior such as pacing and following his wife around the house. He and his wife live on a farm where the patient enjoys being outdoors, puttering with farm equipment, and occasionally playing golf. He still drives and has never been lost nor had an accident. When his wife leaves him alone at home, he becomes anxious and drives to town to look for her. The wife states that everyone in town knows him and looks out for him. Mr. E.F. is a lifelong gun collector with two unlocked gun cabinets containing many guns in his house.

On exam, Mr. E.F. has no focal neurological deficits. He has difficulty with naming and apraxia. He answers most questions by saying “no” or “I don’t know,” evading direct questions. He appears embarrassed by his deficits, but states that his family is overly concerned about his memory loss.

Mr. E.F.’s wife and daughter request that he not be told if his diagnosis is Alzheimer’s disease. They fear he would become depressed and state he would be “destroyed” if he knew.

Discussion

One of the issues in this case is the question of the physician’s responsibility to the public when a patient is potentially dangerous. Mr. E.F. is still driving and has had no accidents nor become lost — so far. However, with a progressive dementia such as Alzheimer’s disease, he may already be an impaired driver and he will certainly become one. Furthermore, he has two cabinets of guns in his house, and his family fears he may become depressed about his disease.

It may be a simple matter, and not a violation of confidentiality, to advise the patient and his family to be certain all the guns are unloaded and all ammunition is inaccessible to the patient. Advising him to stop driving and suggesting that his family take away his car keys are also easy options. However, whether or not to notify the Department of Motor Vehicles is a more difficult issue.

Traditional medical ethics prohibits breaching the confidentiality of the patient. In the past 20 to 25 years, however, breaching confidentiality to protect other members of society has become more acceptable. An early court case occurred in California more than 20 years ago, when a graduate student murdered his former lover. The psychologists who knew of the student’s homicidal ideation were sued by the murdered woman’s family for failing to warn her of the danger.

More recently, the question of the duty to warn sexual or drug-sharing partners of a person with HIV infection has arisen. Some states, such as Missouri, have stated that a doctor has a legally enforceable duty to warn contacts. Kansas courts, on the other hand, have straddled a finer line. In this state, a physician is not obligated to warn contacts of a patient who refuses to do so, but the doctor is not breaching confidentiality if he or she chooses to notify contacts.

A third situation in which courts have been

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Note: The Center on Aging sponsors a monthly discussion of the ethical issues of a geriatric case. The case is presented by a geriatric medicine fellow, and Dr. Bartholome, a pediatrician and ethicist, leads the discussion. The intent is to examine and develop an understanding of the issues involved in the case.

(Continued on page 15.)

Prevention of Hepatitis A

ALLEN J. PARMET, M.D., M.P.H., **Kansas City*

Hepatitis A could follow smallpox into history as an extinct virus. We now have the ability to protect the only reservoir, humans, from infection through vaccination. Last year, a highly effective vaccine that could immunize enough people to interrupt forever the cycle of transmission was introduced into the United States.

Licensed in the U.S. in the spring of 1995, an inactivated vaccine containing alum-adsorbed, formalin-inactivated hepatitis A virus grown in human diploid fibroblasts produced a 90-94% protective titre after a single dose and 99% after a booster dose at one year.^{1,2}

Unlike smallpox, hepatitis A infection is often asymptomatic, and those infections that are symptomatic are infrequently complicated by autoimmune disease.³ This disease is not perceived by the public to be a major health threat. Furthermore, the cost of the vaccine is about \$50 per dose, and with two doses recommended for full protection for adults and three for children, hepatitis A may remain a threat for years to come.

Vaccinating Those at Risk

Attention should be focused on those at highest risk of acquiring the illness or of spreading it to others should they become infected. Specifically targeted are travelers to areas with poor sanitation and people who are occupationally exposed. Travelers to any part of Africa, Asia, eastern Europe and the Americas south of the United States are at greatest risk. Anyone traveling to these areas for more than an insulated business excursion should be vaccinated. The risk of the average American traveling to endemic zones has been estimated at three cases per thousand visitors per month.⁴ If less than four weeks remain before departure, 0.02 mL/Kg of immune serum globulin should be administered simultaneously in another extremity. The second dose of vaccine, while recommended, is not required

unless the traveler will be returning to a high-risk area in the future.⁵

Three occupational groups are at very high risk of hepatitis A: child care workers, health care workers providing for institutionalized patients, and food handlers.⁶ Other groups at risk include sewage treatment workers, homosexual men, and intravenous drug users. Child care workers who deal with infants in diapers are at risk, since children under age 1 with hepatitis A are rarely symptomatic. A single infected infant may fecally inoculate a child-care center and from there the disease may spread into the community. Similar risks abound with institutionalized patients.

Food handlers, particularly those who prepare salads, desserts and items that are not cooked, have been the source for large outbreaks of hepatitis A. In Denver nearly 3,500 people were exposed by a single catering operation between Thanksgiving and Christmas of 1993, and in Kansas City over 2,000 people were exposed to infection at a restaurant salad bar in 1995 (author's personal clinical practice). The latter coincided with an acute shortage of immune serum globulin because of a national recall due to possible contamination. The liability of the employer in these cases makes it desirable to minimize risk by immunizing the most critical personnel.

Screen or Vaccinate?

Since hepatitis A is a sporadic infection in the United States, many people are already immune. The national average is 40% with higher rates among older cohorts and those of lower socioeconomic status. The highest rates, often approaching 100%, are seen in older native Americans living on reservations.⁷ Younger people just entering the work place fall in the 15-26% range, while children have a prior infection rate of less than 10%.⁸

The significant prevalence of prior hepatitis A infection in our population complicates public vaccination policy. Does one screen for immunity prior to vaccinating, or immunize everyone

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without screening? A central city hospital in the Kansas City area began to screen its food handlers prior to immunization. Most of the employees were minorities (85%) and female (65%), and all were lower socioeconomic status. Out of 92 individuals, 33 (36%) had positive IgG titres for hepatitis A.

It cost the hospital \$15 to obtain an IgG titre and \$100 to vaccinate each non-immune employee. This means that to identify and vaccinate two non-immune people at a cost of \$200, three were screened at \$45. The total costs were \$245 for screening and selective vaccination, compared with spending \$300 for vaccination without screening. Therefore, it seems reasonable to screen high-risk travelers and workers for antibodies to hepatitis A, then vaccinate only those without protective titres.

Even if fully applied, this policy would likely not eradicate hepatitis A. A superior policy, such as is currently applied to hepatitis B, would be routine, universal vaccination of infants. Until then, we can expect to continue to see patients with this preventable disease.

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YOUR OLDER PATIENT

(Continued from page 13.)

lenient about breaching patient confidentiality has been in physician reporting of drug use by persons, such as airline pilots, whose actions or impairments can have significant effects on public safety.

Optimally for patients such as Mr. E.F., the family will take action to prevent the patient from driving. For family members who are in denial about their loved one's impairments or who lack the fortitude to take action, the physician may have the responsibility to protect both the patient and the public by reporting the patient's impairment to the Department of Motor Vehicles.

A second issue arising in this case is that of withholding information about the diagnosis from the patient. This issue will be discussed in "Responsibilities and Conspiracies, Part II."

SUGGESTED READING

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Complications of Intravenous Heparin Therapy for Treatment of Thromboembolic Disease in Joint Arthroplasty Patients

C.D. PENCE, M.D., AND SUE SPENCER, R.N., B.S.,* *Wichita*

Thromboembolic disease is a serious problem in both hip and knee arthroplasties. The incidence of deep vein thrombosis has been estimated at 300,000 to 600,000 cases per year in the U.S. with 50,000 deaths from pulmonary embolism. There are numerous reports on this subject in the literature on orthopedic patients. In 1991, Anderson¹ conducted a survey and found only 19% of physicians at community-based hospitals were using some sort of prophylaxis against thromboembolic disease in patients undergoing total joint arthroplasties. In teaching hospitals, 44% of the physicians used prophylaxis. Paiement,² surveying 5,000 orthopedists in 1994, indicated that some type of prophylaxis was used by 84% of the surgeons. A variety of prophylactic treatments have been used, consisting of low-dose warfarin, low-molecular-weight dextran, low-dose heparin therapy, adjusted-dose heparin therapy and the use of external pneumatic compression devices and thigh-high elastic stockings, as well as aspirin. Harrison³ compiled data on the effectiveness of various antithrombotic therapies in patients undergoing hip surgery. He did not show any statistically different reduction in the incidence of thromboembolic disease, as defined by venography, resulting from any particular one of the therapies.

Thromboembolic disease is asymptomatic in the vast majority of patients undergoing joint arthroplasty. The purpose of this study was to delineate the incidence of the development of thromboembolic disease and the complications of treatment in patients undergoing total hip arthroplasty, total knee arthroplasty and endoprosthesis with fractures of the femoral neck at a Wichita hospital.

Materials and Methods

The medical records of all patients undergoing total hip arthroplasty, total knee arthroplasty and hemiarthroplasty for fractures of the femoral

neck at Wesley Medical Center between January 1, 1991 and December 31, 1993 were reviewed. There were 1,225 cases, including 699 total knee arthroplasties. Of these, 21 were primary bilateral total knee replacements, 57 were revision total knee arthroplasties, and 621 were unilateral primary total knee replacements. These patients had an average age of 69.4 years, with a range of 27 to 93 years. There were 331 total hip arthroplasties. Of these, 83 were total hip revision arthroplasties, and the rest were primary total hip arthroplasties. These patients had an average age of 67.5 years, with a range of 21 to 89 years. There were 225 patients with hemiarthroplasty done for fractures of the femoral neck. These had an average age of 80.6 years, with a range of 51 to 101 years.

All cases were reviewed for complication of thromboembolic disease, either deep vein thrombosis or pulmonary embolism. The incidence of prophylactic treatment for the prevention of thromboembolic disease was reviewed. The rate was 92% for the total hip patients, 94% for the total knee patients, and 22% for the hemiarthroplasty patients. Multiple regimens of treatment for prophylaxis of deep vein thrombosis were used. These consisted of thigh-high elastic stockings, segmental pneumatic compression stockings, subcutaneous heparin, aspirin, low-dose warfarin therapy, and low-molecular-weight dextran. Various combinations of these were used. The majority of patients were treated with low-dose heparin therapy in combination with aspirin plus elastic stockings, or low-dose warfarin in combination with elastic stockings or external pneumatic compression stockings.

The diagnosis of pulmonary embolism or deep vein thrombosis was made in 1.7% of the patients. There were 13 cases (1%) with pulmonary embolism (1%) and eight cases (6%) of deep vein thrombosis.

Diagnosis was made on the basis of clinical presentation, laboratory workup (blood gases, EKG) and were confirmed either by Doppler or venograms for deep vein thrombosis and pulmonary ventilation perfusion scans or pulmonary angiography.

One patient who underwent a total hip arthroplasty died two weeks following discharge from

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TABLE 1. Complications

Diagnosis Operator	Case Synopsis	Complication	IV Heparin Started
Osteoarthritis Hip THA	Developed a PE started on IV Heparin	Developed a large right hematoma required transfusion 5 units packed RBCs. Had fatal MI on 14th hospital day.	POD #2
Femoral neck fracture endoprosthesis	Developed PE Preop, anticoagulated prior to OR. Stopped for surgery then restarted.	Developed hip hematoma, blood anemia requiring 5 units of packed RBCs, LOS 28 days.	1st Hospital Day
Osteoarthritis Knee TKA	Developed DVT 3rd Postop Day	Bleeding requiring 1 unit autologous blood, 4 units packed RBCs. Developed peroneal compression neuropathy.	POD #3
Osteoarthritis Hip THA	PE 5th PO Day	Required 2 units packed RBCs prior to PE. GI bleed after starting IV Heparin requiring 4 units packed RBCs.	POD #4
Femoral neck fracture endoprosthesis	DVT Venous Doppler positive to DVT femoral vein	Excessive wound bleeding. Transfused 2 units blood & 2 units fresh frozen plasma. Developed wound infection requiring additional surgery. LOS 51 days.	POD #3
Osteoarthritis Hip THA	PE 4th PO Day	Wound hematoma with sciatic compressive neuropathy drained, required 1 unit packed RBCs. Sciatic nerve injury did not recover.	POD #4
Osteoarthritis Hip THR	Suspected PE 3rd Postop Day	Wound hematoma with sciatic nerve palsy, surgical drainage of hematoma with recovery of sciatic function.	POD #3

the hospital. Pulmonary embolism was suspected, but a postmortem was not obtained. This is not included in the cases of pulmonary embolism.

All patients with pulmonary embolism or deep vein thrombosis were treated with intravenous therapy with the exception of one. This was a case of deep vein thrombosis that was treated with warfarin only, as the patient had been started on warfarin therapy and was anticoagulated at the time of diagnosis. There was one additional patient who developed chest pain on the third postoperative day. A lung scan was performed and was interpreted as having intermediate probability for pulmonary embolism. The patient was started on intravenous therapy. The following morning, the patient developed a large hematoma about the hip and a sciatic nerve palsy. The heparin was discontinued. A pulmonary angiogram done at that time did not show evidence of pulmonary embolism. The patient was subsequently taken to surgery and the hematoma drained, resulting in full recovery of the sciatic nerve function.

Twenty-one patients were treated with intravenous heparin therapy for either pulmonary embolism or deep vein thrombosis. Seven of these cases had significant complications related to increased bleeding at the operative site. There were hematomas requiring multiple transfusions, nerve compression syndromes secondary to hematoma, infection of the hematoma causing additional surgery and gastrointestinal bleeding (see Table 1).

Discussion

We were not able to demonstrate that any particular treatment was more effective than the other. However, 50% of the total hip arthroplasty patients who developed pulmonary embolism or deep vein thrombosis had no prophylactic treatment, and 75% of the hemiarthroplasty patients who developed problems with pulmonary embolism or deep vein thrombosis had no prophylactic treatment.

All cases of complications occurred when the heparin was started on the fourth postoperative day or sooner. Of the 21 patients treated with

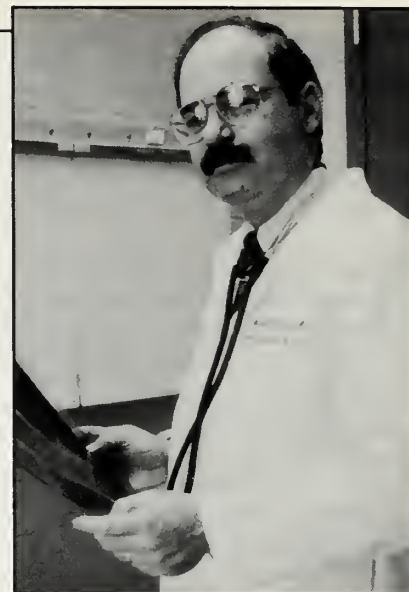
intravenous therapy, eight were started on the fourth postoperative day or sooner. In six of these eight cases (75%), significant complications occurred. The study shows that patients with arthroplasty procedures of the lower extremity who are started on intravenous heparin therapy in the early postoperative period are prone to significant complications, and this is a treatment that should be used cautiously and only with a definitive diagnosis.

The findings of this case correspond to other reports in the literature, specifically Patterson, et al.⁴ They reported an overall incidence of bleeding complications of 25%, and this was related to the time that elapsed between arthroplasty and the administration of heparin therapy. In patients in whom bleeding occurred at the postoperative site, treatment was started on an average of 5.9 days postoperatively. In patients who had no bleeding problems at the operative site, treatment was started on an average of 11 days postoperatively.

The overall incidence of thromboembolic disease appears to be quite low in this study. If this is specifically looked for using studies such as duplex ultrasonography or venograms, it has been shown to be as high as 20-50% in patients undergoing elective joint arthroplasty of the lower extremity. Cases of deep vein thrombosis or pulmonary emboli in this study were all symptomatic. Since our overall incidence of symptomatic thromboembolic disease was extremely low, the methods of prophylactic treatment are probably effective in reducing the incidence of thromboembolic disease. This study did include all the patients who were readmitted to Wesley Medical Center, but it is possible that some patients may have been admitted to other hospitals for treatment of thromboembolic disease that occurred later and were not picked up in this study.

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The Provision of Labor and Delivery Services by Graduates of Four Kansas Family Practice Residencies

ANDREW M. BARCLAY, M.D.,* DEANNA PARKER KNAPP, M.A.,† AND KEN J. KALLAIL, Ph.D.,* *Wichita*

Abstract: The provision of labor and delivery services by family physicians is especially important in largely rural states such as Kansas. The decline in the number of family physicians offering labor and delivery services threatens those who depend on access to primary health care in rural areas. A survey was mailed to all 370 of the University of Kansas School of Medicine-Wichita (UKSM-W) family practice residency graduates. Two hundred sixty-five (72%) graduates responded, of whom 206 are in private practice. Eighty percent of responding graduates practice in communities of less than 100,000, and 72% of those physicians provide labor and delivery services. Although 48 of 206 graduates have ceased delivering babies, 131 still do so, averaging 41 deliveries per year. Sixty-five graduates perform C-sections, averaging 12 per year. Conclusions: UKSM-W graduates afford rural patients considerable access to care. Income, work hours, and practice satisfaction were similar in all three groups (no delivery, delivery without cesarean section, and cesarean section). Policy makers are justified in expanding educational programs in family practice that emphasize complete care of the pregnant woman.

Introduction

Fewer residency-trained family physicians are providing complete pregnancy care in the U.S. today.¹⁻⁴ In the Family Practice News study,⁵ only 21% of the 1991 family practice respondents delivered babies, compared to 33% in 1986. Only 34% of family physicians in rural

areas delivered in 1991, down from 50% in 1986.⁵ The survey also showed that only 16% of obstetricians practice in rural areas, which confirms the critical need for rural family physicians who deliver babies.

In America's heartland, the majority of family physicians deliver babies. Sixty percent of residency-trained family physicians in the American Academy of Family Physicians' West North Central Division still do.⁴ Further, 8.5% of that group performs cesarean sections.⁴

Rosenfeld⁶ reported that only 55 of 126 responding family physicians in rural Tennessee had ever provided pregnancy care, and only 10% were still delivering babies. Only 43% of her respondents, however, were residency-trained, and most were in solo practice. Only 5% had cesarean section privileges.

Several studies provide evidence that a reduction in family physicians who deliver babies leads to poor access to care and increased perinatal mortality. Nesbitt and colleagues⁷ found increased rates of complicated deliveries, prematurity and higher neonatal costs for women in rural communities with fewer doctors who deliver. Women in rural Arizona who received less prenatal care had higher infant mortality rates² than their urban counterparts. Further, a negative correlation between physician availability and infant mortality was found in Indiana's non-metropolitan counties.⁸

Since the UKSM-W Family Practice Program at Wesley Medical Center graduated its first class in 1971, graduate education in family practice has expanded to four programs graduating 27 per year. There is considerable emphasis on training in prenatal care, labor, and delivery. All the full-time family practice residency faculty deliver babies and staff residents in the delivery room.

The following questions were posed regarding the residency graduates. What labor and delivery services are provided by UKSM-W fam-

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TABLE 1. DELIVERY DATA FOR GRADUATES BY COMMUNITY SIZE						
Community Size	Total Number of Physicians		Number of Physicians: No Deliveries #	Number of Physicians: Deliveries/ No C-Section #	Number of Physicians: Deliveries/ C-Section #	Percent of Physicians: Total Deliveries %
	no.	%				
<5,000	58	29%	13	17	28	78%
5,000-10,000	31	15%	7	10	14	77%
10,000-25,000	30	15%	10	8	12	67%
25,000-100,000	42	21%	15	23	4	64%
>100,000	42	21%	29	8	5	31%
Total*	203	100%	74	66	63	64%

*n=203 (3 physicians did not indicate community size)

ily practice residency graduates? How do labor and delivery services vary according to community size, satisfaction with practice, income, and other practice variables? The answers to these questions provide direction for family practice education, allow for better understanding of the decline in the number of family physicians delivering babies, and contribute to new strategies for improving access to rural health care.

Method

To obtain pertinent data about pregnancy care, a questionnaire was mailed in 1992 to all 370 UKSM-W family practice residency graduates from the HCA/Wesley Medical Center (a

6/6/6 program with 146 graduates), St. Joseph Medical Center (a 9/9/9 program with 118 graduates), and St. Francis Regional Medical Center (an 8/8/8 program with 73 graduates) in Wichita, and the Smoky Hill (a 4/4/4 program with 33 graduates) in Salina. A follow-up mailing was sent one month later to non-respondents. Many of the items in the UKSM-W Family Practice Residency Graduate Questionnaire were comparable to the survey used by the University of Iowa, Office of Community-Based Programs. This Iowa survey has obtained data on family practice residency graduates for 20 years. The questionnaire presented 28 items regarding the graduates' demographics, residency education and medical practice characteristics. Specific questions were asked about practice and procedures related to reproduction, practice arrangement, gross and net income, practice problems, hospital privileges,

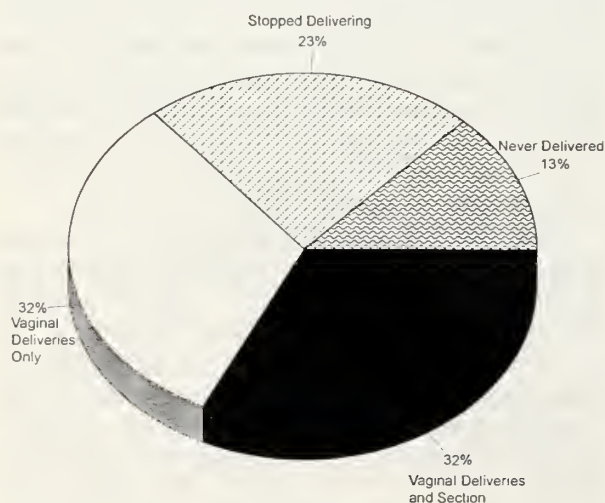


Figure 1. UKSM-W family practice graduates delivering babies.

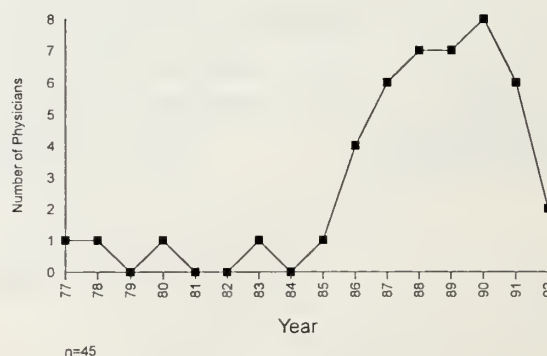


Figure 2. Number of physicians who ceased delivering babies, by year of cessation, 1977-1992.

TABLE 2. NUMBER OF GRADUATES PERFORMING PROCEDURES
RELATED TO REPRODUCTION
(n=202)*

#	Graduates	%	Procedure
139		68%	Endometrial biopsy
124		61%	D & C
114		56%	Vasectomy
83		41%	Cervical biopsy
62		30%	Colposcopy
49		24%	Tubal ligation
22		10%	IUD
15		7%	OB ultrasound
9		4%	Hysterectomy
8		3%	Exploratory laparotomy

*four respondents did not respond to this item

and career satisfaction. Questionnaires were returned directly to the graduate's residency program. Data analysis was completed using the SPSS statistical package.⁹ Statistical significance was calculated using chi square and t-test analyses, as appropriate.

Results

Distribution. Of the 370 graduates, 265 responded (72% response rate). For the purposes of this study, the analysis was limited to the 206 (56%) respondents in full-time private practice. Fifty-six percent of the respondents practice in Kansas, and 24% practice in the surrounding states of Nebraska, Colorado, Oklahoma, and Missouri. The mean age of respondents was 38 years (SD = 5.4; range 29-55). Participation in solo (23%), family practice groups (56%), and multispecialty groups (19%) by the graduates was comparable to national data. The geographic distribution of respondents was similar to that of non-respondents.

Table 1 displays the percentage of physicians per community size. The majority of graduates currently practice in communities of less than 25,000. Eighty percent of graduates practice in communities smaller than 100,000. Half have less than a total of seven physician colleagues in their communities.

Pregnancy care. Sixty-four percent of the 206 respondents (Figure 1) delivered babies, with a mean of 41 deliveries per year. Thirty-two percent perform C-sections, with a mean of 12 per year. Table 1 shows that 78% of the group of UKSM-W family practice graduates in towns of less than 5,000 population delivered babies. Only 48 graduates (23%) have ceased delivering babies (Figures 1 & 2). Of those who started practice delivering babies, 73% are still doing so; moreover, the cessation rate has slowed in the last two years. The graduates, in addition, perform a wide variety of procedures related to reproduction (Table 2).

The percentage of graduates delivering babies within and outside of Kansas is identical.

Satisfaction. Of those in practice, 87% are satisfied with the practice. No statistically significant difference was seen between satisfaction expressed by graduates delivering babies compared to those not delivering babies.

Preparation and work activities. Ninety-seven percent reported they were well prepared for practice, including labor and delivery, and 90% are pleased with the choice of family practice as a career. Seventy-one percent teach residents and medical students. Work hours are slightly higher for physicians who perform cesarean sections (Table 3), and those physicians tended to see

TABLE 3. WORKING HOURS, PATIENTS SEEN AND LIABILITY COSTS OF FAMILY PRACTICE GRADUATES

	Office Hours	Hospital Hours	ER Hours	Other Hours	Total Pts/Day	Medical Liability Insurance Annual Cost
No Deliveries	39	7	5.7	2.4	33.3	\$6,451
Deliveries/No C-section	39	9	5.0	2.2	27.0	\$10,279
Deliveries/C-section	38	11	5.2	2.2	39.6	\$11,731
Mean all graduates*	39	9	5.7	2.4	36.7	\$9,645

*only 163 reported insurance costs

more patients, although these differences were not statistically significant.

Income. The income range gross (\$250,000-\$300,000) and net (\$90,000-\$100,000) were identical for all three groups (those not delivering babies, those delivering babies without cesarean section and those performing cesarean section). Only three physicians out of 206 indicated that financial concerns are a major source of dissatisfaction. The mean medical liability costs were \$3,828 more for physicians performing cesarean sections than for those who do not deliver babies. Graduates delivering babies in Kansas pay a mean of \$12,392 for medical liability coverage, compared to graduates elsewhere, who pay \$9,224 ($t = 1.83$, $p < .05$).

Discussion

UKSM-W residency programs produce graduates who deliver more babies than other family practice graduates because they are more rural than the national average, and there is a local emphasis on providing total pregnancy care training. All residents in UKSM-W programs take a minimum of four months curriculum in prenatal care, labor and delivery, and gynecology. Additional electives are encouraged, and residents often deliver more than 100 babies by the end of their residency. All UKSM-W residency faculty deliver babies. Many of the graduates practice in communities which have a modest number of physicians and where it is unusual to have an obstetrician. Family physicians practicing in smaller communities are more likely to deliver babies. More of the residencies' graduates deliver babies, and many more perform cesarean sections than the national average. The cost of

medical liability insurance for UKSM-W family practice graduates who deliver babies is approximately \$4,000 per year higher than the national average. This factor should not prevent family physicians from delivering babies either in Kansas or in the region.

Kansas survived a serious medical liability problem with such high insurance rates that graduates were discouraged from delivering babies in this state. Since 1988, the medical liability insurance rates in Kansas have diminished up to 25% and may be responsible for the reduction in the number of our graduates who stopped performing cesarean deliveries. Despite paying \$3,000 per year more for medical liability insurance than colleagues in other states, the percentage of graduates who stayed in Kansas performing deliveries is the same as graduates who left the state. The relative prevalence of family physicians delivering babies in rural Kansas is a factor in maintaining access to care. In Indiana, limiting access to care has been linked to higher perinatal mortality.⁸

During 1970-91, an average of two residency graduates per year stopped delivering babies. Those who did so have been replaced by more recent graduates. The data do not include older non-residency-trained physicians who may have been more likely to have stopped delivering babies during that time period.

The national attrition of family practice graduates delivering babies has been most dramatically identified by Gaskins, et al.¹⁰ in Tuscaloosa, Alabama. Similar pressures exist in both states, although community expectations may be higher in Kansas and distance to larger communities greater.

A recent survey by Family Practice News¹¹ suggested a national dissatisfaction of family practice graduates with their practice life. This dissatisfaction was not reflected in the study data, nor do the data reflect a discrepancy in satisfaction between the graduates who deliver babies and those who do not. Delivering babies has been demonstrated to lead to a younger practice with more procedures related to the reproductive system.¹² Bredfeldt and Sutherland¹² found that family physicians performing cesarean sections actually had a lower income than their colleagues. Our data did not support that conclusion.

In summary, the family practice residencies associated with UKSM-W are providing graduates of high quality who are satisfied with their practice of medicine. Sixty-four percent continue to deliver babies, and one-half of these graduates continue to perform cesarean sections in communities where those services are essential. The emphasis on training in the care of pregnant women at the UKSM-W programs is successful and should continue. The reproductive services provided by graduates enhance access to care in this rural state.

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Testicular Seminoma: Review and Experience in Northwest Kansas

BABU PRASAD, M.D.,* *Hays*

Seminomas of the testes are of germ cell origin. Seminoma is the most common malignancy in men between 20 and 35 years of age. Seminoma is also the most common testicular tumor.

Men with cryptorchidism have an increased risk of developing testicular cancer, which is about 35 times that of the normal frequency. The incidence of testicular cancer is 3.8 per 100,000 males in the United States. North American whites, Scandinavians and other western Europeans have the highest rates, with the highest incidence in Denmark: 6.7 per 100,000 males. The lowest rates occur in Asians, Africans and North American blacks.

Seminomas have a distinct natural history and a treatment radically different from non-seminomas. There are basically three histologic subtypes of seminomas: classical, spermatocytic and anaplastic. Classical seminoma is the most common histologic variety seen. Ten percent are spermatocytic. These are less aggressive and are generally seen among older patients. Anaplastic seminomas constitute only 5% of all cases, and these tumors have increased mitotic activity. The histologic subtype has no prognostic importance. In clinical presentations, the usual presenting symptom is a painless mass, although pain, heaviness and tenderness are not uncommon.

Diagnostic Workup

A complete history should be taken, including information about previous inguinal or scrotal surgery, undescended testes, orchiopexy, etc. Physical examination can usually distinguish testicular masses from those involving neighboring structures such as epididymis. Testicular ultrasound is useful in differentiating solid masses

from cystic lesions. When a testicular tumor is suspected, diagnosis should be confirmed by histologic examination of the tumor. Current thinking discourages scrotal biopsy. The appropriate surgical procedure is a radical orchiectomy through an inguinal incision. The laboratory studies should include CBC, chemistry, serum HCG, alpha-fetoprotein, placental alkaline phosphatase levels, etc. The radiographic studies should include a chest x-ray and CAT scans of the pelvis and abdomen. Lymphangiography can also provide very useful information. The most widely used staging system for classifying testicular seminoma is shown in Table 1.

The treatment should consist of high inguinal orchiectomy. Adjuvant irradiation to retroperitoneal nodes is always administered post-operatively. Patterns of care studies have indicated that doses as low as 2,500 cGy may be effective in an adjuvant setting. Platinum-based chemotherapy is used in patients with advanced disease.

Experience at Hays Medical Center

We have reviewed our experience at Hays Medical Center with patients who have testicular seminoma. There were 19 referrals to the Radiation Oncology Department between 1978 and 1991. The age distribution of these patients is shown in Table 2.

Two patients had anaplastic seminoma. In our series, spermatocytic seminoma was not found. The rest were classical seminomas. Only three patients presented with testicular discomfort or heaviness. Sixteen of the 19 patients were in

TABLE 1. STAGES OF TESTICULAR SEMINOMA

Stage I	Disease limited to testes.
Stage II	Involvement of infradiaphragmatic nodes.
Stage III	Involvement of supradiaphragmatic nodes.
Stage IV	Extralympathic disease.

*Radiation oncologist, Hays Medical Center

Address correspondence to the author at 2220 Canterbury Drive, P.O. Box 8100, Hays, Kansas 67601.

TABLE 2.
AGES OF PATIENTS TREATED AT
HAYS MEDICAL CENTER

<i>Age</i>	<i>Number of Patients</i>
< 30 years	9
30 to 45 years	8
> 45 years	2

Stage I. Three patients had Stage II disease. In our series, only one patient had prior scrotal biopsy.

Sixteen patients received irradiation to bilateral para-aortic nodes and ipsilateral pelvic lymph nodes ranging from 2,500 cGy to 3,000 cGy. One patient received 2,040 cGy in 17 fractions to the whole abdomen due to massive intra-

abdominal disease. Three patients with Stage II disease also received prophylactic mediastinal irradiation to 2,000 cGy.

Sixteen percent experienced nausea requiring antiemetics. Thirteen had some level of leukopenia. Three patients had diarrhea and were placed on a low-residue diet and Lomotil prn. Two patients experienced thrombocytopenia. One patient had mild esophagitis. None of the patients had life-threatening bone-marrow suppression or any other complication.

All 19 patients are living free of disease with follow-up ranging from three to 11 years.

Conclusion

In summary, patients with early-stage seminomas are highly curable with orchiectomy followed by irradiation. Patients with advanced disease are generally treated with chemotherapy following surgery, also with excellent results.

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Epistles of Dr. Karl

The Selected Correspondence of Karl A. Menninger, 1919-1945, edited with an introduction by Howard J. Faulkner and Virginia D. Pruitt (University of Missouri Press, Columbia, 1995; first published by Yale University Press in 1988), 451 pp.

The Selected Correspondence of Karl A. Menninger, 1946-1965, edited with an introduction by Howard J. Faulkner and Virginia D. Pruitt (University of Missouri Press, Columbia, 1995), 278 pp.

As a medical student in Canada, I saw the 1962 CBS documentary on the progressive management of mental illness at the Menninger Foundation in Topeka and wondered if I would be too late to sit at the feet of Drs. Karl and Will following my graduation. It turned out I was able to, and it shaped my life in a way I could not have imagined. Perhaps this is a measure of how compelling these two brothers were in persuading the country to regard psychiatry as both a humane and a scientific endeavor worthy of support for a national effort to improve the care of its mentally ill.

As his students at the Menninger School of Psychiatry, we related to the charismatic public persona of Dr. Karl and held him in enough awe to avoid much discussion about the private Karl Menninger. This collection of letters also makes little reference to the problems beneath the surface, even though the editors added background in their introductions to each section. It is necessary to look to other sources for more information about his private life, including notably *Menninger: The Family and the Clinic*, by Lawrence J. Friedman, published in 1992.

The letters are published in two volumes and include correspondence received by Menninger to which he is responding. He was a prodigious letter-writer, stating in 1939 he estimated he wrote 80 letters a week. The 10 letters with a 1939 date, for example, represent only a minute proportion of his total correspondence. The first volume was initially published in 1988, when Menninger was still living, and he took the liberty of excluding a number from the original selection, as well as excising portions from "perhaps a dozen others." This was after the authors, who lived in Topeka and probably were wary of incurring Dr. Karl's wrath, had presented him with their final selection. This first volume therefore

does not contain some of his more unguarded comments, which might have revealed more of what has been reported by other informants.

The initial letters show a preoccupation, as one would expect, with establishing himself as a psychiatric practitioner in Topeka who also devoted considerable energy to making contact with leaders in the field from all over the country. Initially he was cool toward psychoanalysis, like his mentor and teacher in Boston, Ernest Southard. Southard's sudden death in 1919 interrupted their close relationship, and he was exposed to psychoanalytic ideas with which he became quite intrigued, even "infatuated," as he put it. Though he experimented with psychoanalytic techniques, he did not undertake the first of his two brief personal analyses until 10 years later, in 1930. His reaction to his only contact with Sigmund Freud in 1934 reveals much about Menninger and his attitude toward psychoanalysis. He was deeply hurt by Freud's apparent disinterest, but refrained from being critical and remained loyal. Later he worked very hard to get Freud's daughter, Anna, to come to Topeka. Though he did not succeed in getting her to accept a position at Menninger, she did on more than one occasion come as a visiting lecturer.

Much of the correspondence in the middle part of Dr. Karl's career deals with his aggressive efforts to define psychoanalysis within American psychiatry. He relentlessly attacked those who strayed from the orthodox position and attempted to redefine the field in their own way, accusing them of disloyalty. There are also numerous contentious letters in which he criticized colleagues with whom he was on generally friendly terms, frequently because he believed he himself had been slighted or misrepresented by them. Menninger's belligerent responses to some of his

critics alternated with elaborate efforts to explain to and appease those who showed deference to him. His correspondence poses the obvious question about the extent to which his theoretical formulations were predisposed by his psychological makeup, rather than the "scientific" investigation to which he frequently made reference. Of course the same can be said about the other psychoanalysts of his time, who were riding the crest of a heady new ideology which they were confident could significantly modify human behavior for the good, just as technological advances were changing the way people lived and greatly enhancing their material standard of living. The human resistance to change even in the face of enlightenment was troubling to Dr. Karl, just as it was to others. It led Freud to speak of death instinct, upon which Menninger elaborated in his book *Man Against Himself* in 1938.

The long-standing conflict with his wife came to a head with his divorce in 1941, but only one letter mentions this, and then only in passing after he was remarried. We are left to reading between the lines in his correspondence to Karen Horney, his wife's analyst, and his later relentless attacks against Horney in other correspondence. When his former analyst Franz Alexander pointed out the need to differentiate between "personal issues and objective statements," Menninger dismissed him out of hand.

By the end of the period covered in the first volume, he was 48 years old and established as a leading figure in American psychiatry, and together with his brother and father, recognized as heading the foremost psychiatric treatment center in the country.

The second volume covers the next 20 years, the pinnacle years of the Menninger establishment, which now became the Menninger Foundation — though not without considerable reservations about possible loss of control entailed in this change. As it turned out, the

issue of control was fought out within the family itself, between Karl and Will. After a threatened resignation by key figures within the Foundation, Dr. Will took control and was supported by the trustees. Karl reacted to this in a petulant but ineffectual manner, dramatically writing on his April 21, 1965 calendar page the words, "the day Karl Menninger was assassinated!" This was the culmination of a long and difficult, though muted, struggle between him and Will. But the correspondence in the second volume gives no hint of this problem, with the exception of the final letter, dated October 3, written by his brother Edwin, who lived in Florida, but participated in the deliberations of the Foundation as a trustee. This remarkable letter from a non-psychiatrist to his nationally famous brother, already in his late sixties, chides him as one would a child for his manifest selfishness and fearfulness, and then is signed "affectionately."

Karl Menninger dramatically illustrated by his life the stereotype of the psychiatrist who remains a prisoner of his own complexes. Yet this man was enormously influential in popularizing psychiatry and destigmatizing mental illness. Throughout these two volumes, there are numerous examples of his forceful defense of groups which society scapegoats, namely the mentally ill and other feared and unpopular minorities within American society. The extraordinary development in Topeka of the most prestigious psychiatric clinic in the country, along with a training program preparing 15% of the nation's psychiatrists after World War II certainly attests to a remarkable family dynamic among the Menningers. The availability of these letters adds something to our understanding of this phenomenon, but many readers are likely to find them disappointing because of how little they tell us.

George Dyck, M.D.

Funny or Tragic?

Whether an incident is funny or tragic often depends on the viewpoint. Here is a case. I received a call from a doctor in a neighboring town. He had a patient, a young lady afflicted with a serious heart disease. Would I come? I would. It was a rainy day and the road was a sea of mud. I drove my horse until he became exhausted. Then I implored a farmer to take me the rest of the way. His outfit was a farm wagon and a very sophisticated span of mules. When I arrived at the house, the family doctor was waiting for me. The patient had been employed in a neighboring town. Previously always in the best of health, she had suddenly been taken seriously ill. The symptoms were very confusing to the doctor. Rapid respiration was all he could see and he concluded the trouble was a weak heart. I saw a fine plump girl with pink cheeks. She had been weeping. Her pulse was slower than mine and as regular. Knowing the disposition of the doctor, I asked him and the family to let me talk to the patient alone. It was a risk but necessary. I sat down on the edge of the bed and talked to her like a child, for she was only a child, though nineteen years old. "Now tell me," I began, "now tell me just what happened to him." She burst out weeping. "I don't know," she sobbed. "He just up and married another girl." I inquired in detail all about him, his appearance, his occupation, and all that. No occupation, very handsome, with brown curly hair. I evaluated him in my own way. Handsome men, I volunteered, live off either the earnings of their wives or of their fathers-in-law. The commercial value of curly brown hair, figured in terms of buckwheat cakes, I opined was not very high.

I talked to her at length, on how fortunate she was that fate had intervened for her. Mere child, fine figure of a girl, beautiful face, young, she had no need to grieve. In calling a young girl beautiful one runs no risk of offending. One may take a cue from the newspapers. Every female



that gets into devilment, if under seventy years of age, is referred to as "attractive." This I presume is following the usual newspaper habit of giving the people what they want: to wit, bunk. I explained to her that fate had much better things in store for her. I administered this sort of talk for a while and finally her face began to relax, just as that of a nine-month-old baby does when she is about to reach out her arms to you. I wrapped a blanket about her and said, "Let's go out and tell Mother you are all right." She tripped lightly out of the bedroom, through the living room and into the kitchen where the family doctor and the family were talking. The mother's look as she beheld her smiling daughter walking for the first time in weeks was something you do not see in books. "She will be all right," I assured the doctor. Then I sought the farmer and his mules and made the trip home; elapsed time, fourteen hours for the round trip. Now is this tale funny or is it tragic?

In the same community, some years later, I received a call from the same doctor. A girl was in terrible condition. She worked in a neighboring town and had come home sick, with a high fever and in terrible pain. That sounded suspicious but I could learn nothing further from the doctor. Mud as usual, and the team walked every foot of the way. Time, seven hours. The doctor was waiting for me. He announced that since calling me, the patient had become much better and was now quietly sleeping. She had an abscess where no lady ever has an abscess. The abscess had burst of its own accord and the patient was at once relieved. There was nothing to do professionally but I did make some remarks of a general nature. I had read during the trip out; I was too mad to read on the way back. I made uncomplimentary remarks, with special reference to professional incompetency and the general cussedness of humanity, all the way back. Twice seven hours. Of course, having done nothing I was entitled to no pay. But then that family never paid anything anyway, so there was no occasion to make a concrete application of this remark. Five dollars for the team and fourteen hours on the road was all I was out. Personally, I never could detect any humor in this incident.

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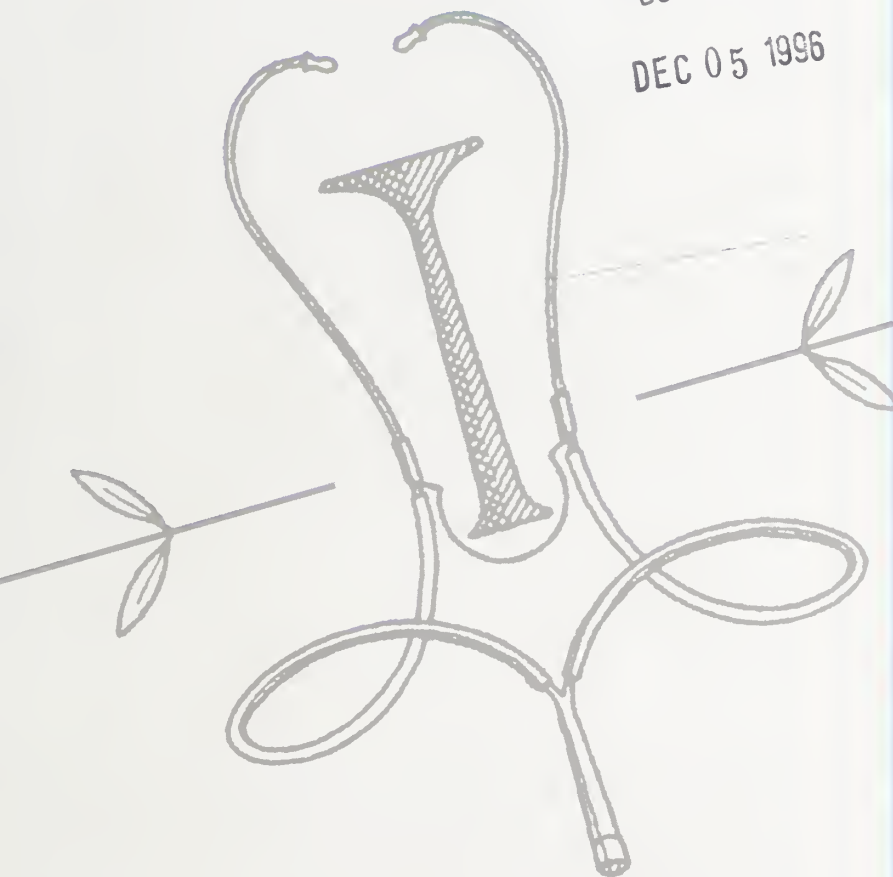
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Volume 97, Number 2

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Not goals but transitions . . .

Some physicians say the “golden days of medicine” are gone, and managed care is responsible for the destruction. Still others blame market forces for the recent “commodification” of health care. Regardless of why or how, your world is changing, and here at KMS, so are we.

The Kansas Medical Society dedicates itself to providing physicians the tools needed to compete effectively in medicine’s changing environment. Through a coordinated communications process, we strive to provide current and accurate information essential to the physicians of Kansas.

In the mass media market of the 1990s, a reader has to choose; it is simply impossible to read everything that appears in the mailbox. With the advent of computers and the Internet, the Information Age dictates that KMS update itself to remain a vital, contemporary source of physician information.

With this issue, *Kansas Medicine* debuts a fresh look. The Journal’s new layout is designed to streamline the reading process and enhance visual appeal. We have changed the print to allow for easier scanning of articles. The addition of quotations set apart from the text allows readers to evaluate articles quickly. Because articles do not jump from one page to another and back again, the organizational format facilitates quick location of interest areas.

From changes in format to changes in staff, *Kansas Medicine* has survived this year of transitions. The rebirth, however, was not without its complications, and unforeseen circumstances have delayed your receiving this first issue. For that we are truly sorry.

The Editorial Board has embraced this evolutionary process and as the page turns to the 21st century, *Kansas Medicine* pledges to continue the tradition of excellence it began in 1901. **KMS**

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*Not in his goals
but in his transitions
man is great.*

~~Ralph Waldo Emerson

*The Journals and Miscellaneous Notebooks
of Ralph Waldo Emerson, Volume V*

What's new?

Warren E. Meyer, MD



For many years members have heard the report of the Journal at the Annual Meeting of the Kansas Medical Society. You have listened as the Editorial Board expressed its great appreciation for the Society's generous subsidy of the Journal, *Kansas Medicine*.

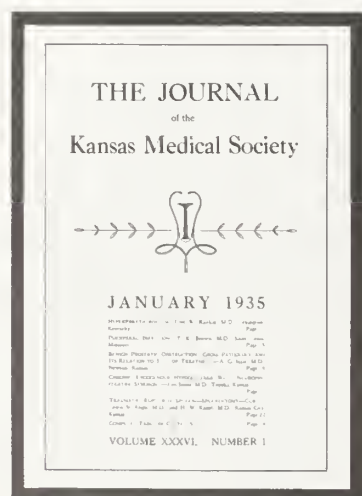
It may surprise many of you to know that in its early beginnings, the Journal helped financially support the Society through its advertising revenues. Those of you who have served as delegates in recent history are aware of the problems we have had with the decline in advertising revenues. While this persists as a serious problem, we continue to seek new advertisers.

In recent actions, the Editorial Board has tried to confront some of the Journal's biggest challenges, and in 1995, the production of *Kansas Medicine* was altered to a quarterly publication.

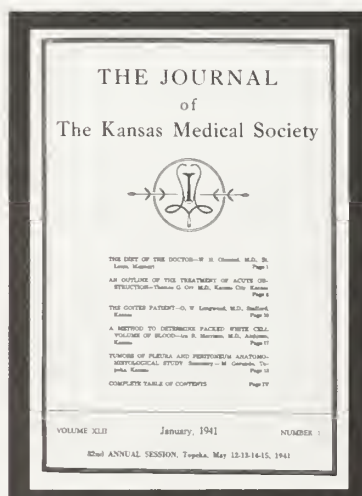
This issue brings you more changes which the Board hopes will not only ease the Journal's mounting financial pressures but also provide readers an eye-pleasing and mind-

stimulating magazine. Some of the changes appearing in this issue include the following:

- ◆ The new paper for *Kansas Medicine* is less expensive and can be purchased annually with paper for KANSAS PHYSICIAN.
- ◆ Two color printing (the new cover) is much less expensive than four color printing (the old cover). Again this will reduce the publication costs.
- ◆ The logo, which is uniquely *Kansas Medicine*'s, was designed expressly for the Journal by the renowned Topeka graphic designer, Bradbury Thompson, a friend of former editors, Drs. W.M. Mills and Lucien Pyle. A combination of Rene Theophile Laennec's first "stethoscope," and its more modern counterpart, along with leaves of foxglove, tie together medicine's past, present, and future. The logo first appeared on the cover of the January, 1935 issue and has been on every cover since that time. Dr. Orville R. Clark, former editor of the Journal, wrote



1935



1941



1942

in 1955 that the logo, "has become as much a part of the Journal as any of its features on the inside, and is something which is ours alone."

The Board felt strongly that this symbol of our heritage should continue to occupy a prominent place in the publication.

- ◆ Some new departments are making their debut. *In Memoriam*, lists obituaries of deceased physicians; *The Last Word* contains comments by members on questions of current interest to medicine; and *Lest We Forget* reprints excerpts of current interest from previous editions of *Kansas Medicine*.

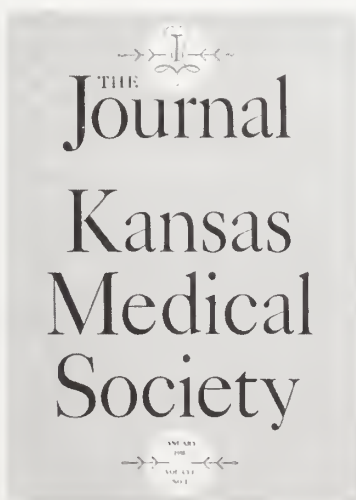
Reprints of various covers of the Journal over the years are reproduced below to show that *Kansas Medicine* has undergone many changes over its long and distinguished career. The Board plans to preserve the tradition of excellence established in 1901. As is

always the case, we need the input of our readers to be certain that we respond specifically to your needs, concerns, and wishes. **KMS**

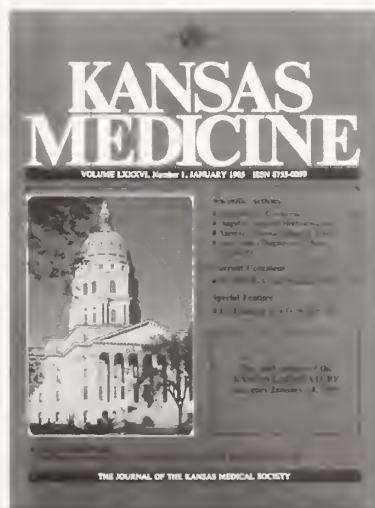
If you have any questions or comments about the new format, feel free to contact Allison Peterson at the KMS office, 913.235.2383 or 800.332.0156. We look forward to hearing from you.

Publications which continue through numerous years are confronted with an interesting problem. If changes in format and arrangement are not frequently made, the publication soon finds itself operating in a stereotyped, monotonous manner with a format which is obsolete and not in keeping with progress.

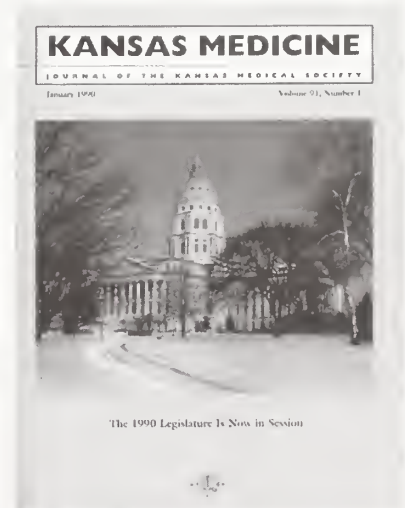
~~Kansas Medicine Editorial, 1941



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Kansas is like its wheat: tough and firmly rooted

Richard V. Ohmart, MD

I'm driving across Kansas—actually zig-zagging across Kansas. As a native Kansan, reared and educated in the state, it's nothing I haven't done a multitude of times. Yet there are certain scenes and sounds, both familiar and unfamiliar, that thrust themselves at me on each trip. I am alone today, so perhaps I am more sensitive to some of these stimuli.

My trip starts with a visit to the Farm Services office in Scott City, then east on Highway 4 and a stop or two at wheat fields. After wandering out into the fields, I stoop to pull some of the sparse, foreshortened plants. Dry they may be, but firmly anchored in the soil, with a good taproot. In spite of all the dire predictions, moisture at the right time might yet bring a tolerable crop to fruition. Of course, wind with no moisture will prove disastrous.

Following Highway 4 through the small towns that dot its western path demonstrates again the curious juxtaposition of apparently dying towns, composed primarily of uninhabited, tumble-down buildings, but each with an occasional new home or business. Ransom, of course, has become well known for its EACH/PCH arrangement with Hays Medical Center.

To my right I see a remarkably green and vigorous field of wheat; it stands out like a flag in the tan and gray landscape. As I pass it, I see the pipes and ditches that tell me it is an irrigated field. No wonder! I stop to take some pictures of a decrepit house, and the lone tree next to it, wondering what joy and sadness once reverberated through that home. On my way back to my car I startle a pheasant, and once again I am struck by that bird's impressive color scheme.

At Wakeeney I join the interstate, both for ease of driving and to speed my journey. But my reveries about Kansas are not over. I usually drive a "safe" five miles above the speed limit of 65 and pass three cars for every one that passes me. Today, at the same speed, I am passed by ten cars for every one I pass. The ratio increases as I near Topeka and Lawrence, in spite of a roiling wind, which moves me across the two lanes of traffic as it chooses.

It is State Basketball Tournament weekend. I meet the buses from the small schools headed west for Hays and

Manhattan, each painted with signs indicating that it, and only it, contains the best basketball team in the state. Each is followed by its own convoy of painted cars, vans, etc. I pass bus caravans from the larger schools headed for Salina and Topeka and the large school tournaments. One McPherson bus appears to have a trailer in tow, perhaps carrying band instruments. I dimly remember my high school days and similar trips. Much brighter are the memories of my children's high school days, and the excitement felt by the entire community when our team actually won the state tournament.

I stop at a Stuckey's for gas and a brief rest. Inside I notice a tee shirt stating

I Love

To See

Kansas

In My Rear-view Mirror.

Clever, perhaps, but I don't agree with it. There is also the usual assortment of Oz shirts, jokes, etc. For good or bad, we are inextricably entwined with Baum's book.

Back on the road I do a little bird-watching. The harriers of Kansas have been replaced by red-tailed and red-shouldered hawks as the most numerous large birds I see. A red-tail, hovering over the highway in the wind, veers slightly, revealing the magnificent tail coloration that gave him his name. Perhaps the earth and plants are not yet showing their spring colors, but the birds certainly are.

Driving past

Fields of Fair
winery brings a
smile. I am just
back from a four-
day CME
program in the
Napa Valley. But
our Kansas wine
has its own
bouquet. This
also kindles

memories of my wife singing, "Oh, They Say to Drink's a Sin in Kansas," a folk song about dry Kansans voting liquor out

*Practicing medicine
here is frustrating,
rewarding,
all-consuming, fun.
It is never boring.*

KANSAS IS LIKE ITS WHEAT: TOUGH AND FIRMLY ROOTED

Continued from page 7

while “drinkin’ all they kin.” She especially enjoyed singing that ditty for the Reverend Dick Taylor, then head of the Kansas United Dry Forces. Dick, a man with a sense of humor, seemed always to enjoy her gentle ribbing.

Dotted across the state I note the ubiquitous “Abortion Stops a Beating ♥” signs. The KU and K-State logos are displayed in various fashion; one farmstead apparently has ties to both. I spot a barn with “No God, No Peace; Know God, Know Peace” painted on the side. At the end of the barn is a large, round hay bale with a sheet bearing a painted KU Jayhawk. I enjoy the juxtaposition. As I near Topeka, I am struck by several signs I have not seen before. One large billboard advertises “Vasectomy Reversal, Money-Back Guarantee,” and lists a Houston phone number. I wonder how many of the men zipping past me, no doubt in a hurry to get home to their wives, would be interested in such a procedure. Another billboard, featuring a scantily clad (or perhaps unclad—with hair strategically arranged) blonde urges me to stop at “The Best Gentlemen’s Club in the Midwest.” I wonder whether this is a high-class strip joint, a house of prostitution or merely another “Hooters”—but not enough to follow the posted directions to the club itself. I also wonder if they care there whether one’s vasectomy has been reversed or not. “Potawatomie Bingo! Big Bucks!” reads another sign. I wonder if the play on words is intentional or accidental.

The radio provides equally diverse entertainment. Music ranges from Rockin’ Jesus through the travails of a man “Old Enough to Know Better But Still Too Young to Care” to Debussy’s “La Mer.” The unctuous tone of the National Public Radio announcers analyzing Bob Dole’s chances in the New York primary the next day are counterbalanced by the hoarse exhortations on the Christian stations.

The only non-changing factors across the state are the wind, the need for rain, and the colors of the earth and plants—all told, a fascinating journey through the microcosm that is Kansas.

Reflecting the climate and geography of their state, the people of Kansas, with whom I have lived my entire life, are a hard-headed, similar, but yet diverse group of individuals. It is little wonder that they have a strength and endurance that sustains them through hardship and suffering, an exuberance

that in good times bursts out in excess, and an optimism that spring is just around the corner and the wheat will survive. They are as tough as that hard winter wheat, which struggles all across the state this year. These characteristics are nowhere better demonstrated than in rural western Kansas. Practicing medicine here is frustrating, rewarding, all-consuming, and fun. It is never boring. **MS**

The author is a family physician. Readers may address correspondence to the author at New Frontiers Health Services, Inc., 123 Center, P.O. Box 756, Oakley, Kansas, 67748.

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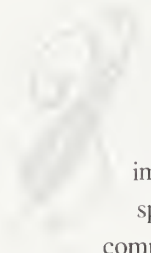
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Don't let silly errors mar your writing

S. Satya Murti, MD



Our illustrious predecessor, Galen, realized the importance of clarity in spoken and written communication. He remarked almost 2000 years ago, "The chief merit of language is clearness, and we know that nothing detracts so much from this as do unfamiliar terms." The ability to write followed the development of language closely. Durant calls writing the "greatest human invention since the coming of speech." There are many brilliant writers among the ranks of physicians. The pressures of daily routine, however, blunt our linguistic edge. We have an understandable and conscionable need to abbreviate, syncope and sacrifice style to content. We share this need with other professionals in physical, biological and monetary sciences. We split infinitives, dangle participles, run sentences into each other and fondly embrace neologisms.

At times, however, our errant ways are more flagrant. We write in a distraught and thoughtless manner; the results are sometimes innocuous, and sometimes humorous. If we consistently defy Galen's caution, though, we suffer unpleasant consequences at the hands of reviewers, attorneys and consumers. Creeping errors have spared no one. Even Samuel Johnson reportedly erred in his seminal work, *The Dictionary of the English Language*. G.B. Shaw despaired of the ways of the English, who "have no respect for their language, and will not teach their children to speak it." Thus, we

are in august company when we err unwittingly. This excuse notwithstanding, remember that those who read us derive mischievous delight, or malicious slight, from our written errors. Following are a few examples I have come across recently. I hope they will stress my point that with careful writing we avoid embarrassment and self-incrimination.

- ◆ This pulmonologist's care was excellent. His notes and discharge summary attested to his kindness and dedication. His good intentions were not in question, until the point where he wrote, "I then left on vacation on the 29th. Following this, the patient made a slow, steady improvement." If you are ever in need of a non sequitur, grab this one.
- ◆ This note is from a podiatrist's history. She finds: "Social history reveals no trauma to the toe. Patient is on Lanolin for his heart . . . [and] on Zantos for his stomach." David Kessler, please note these off-label uses; or did you approve them on fast track?
- ◆ Our hematologist is pleading the case of her patient: "To be honest, Mr. C still works full-time, is running on a very low hematocrit simply because he has the desire to." Is this a case of misplaced desire?
- ◆ All caution was exercised before "Eurokinase was infused," writes

There are many brilliant writers among the ranks of physicians. The pressures of daily routine, however, blunt our linguistic edge.

this reviewer. Caution is, indeed, appropriate. We do not want any Euro-Trash here, especially if purchased with the Euro currency!

- ◆ Here is a policy statement on the administration of EPO (erythropoietin): "The following providers may furnish EPO for home self-administration:

- Medicare approved facilities.
- Suppliers of durable medical equipment.
- Suppliers of home dialysis epiphany."

This is a hard one to decipher.

Probably the intended word was "company." In any case, we welcome all attempts to introduce divinity into medicine. We shall accept it in any form, whether through prayer or through a home dialysis company.

- ◆ A continuing education manual directs our attention to a photomicrograph. This picture depicts: "Sections of the brain showing normal patient." When does one become a normal patient?
- ◆ The total hip replacement was uneventful. The day after surgery, our patient lost consciousness. The attending orthopedist, referring to this event, noted in his discharge summary, "On the second post-op day suddenly and without explanation she became unresponsive." How ungracious of her not to forewarn us of her intention to slip into a coma!
- ◆ This is another case with an adverse outcome. Nursing notes read as

follows: "Dressing changed. Patient was oriented." Whether the patient was, indeed, alert or not is the question. The plaintiff's attorney may well ask: "But doctor, the nurse's note indicates your patient was oriented. Yet, you say that he was unaware of his surroundings, and lethargic? One of you is not telling the truth," he insinuates. Yes, the nurse tried to orient a stuporous patient. Unfortunately, the attorney takes the passive verb (her attempt to orient) in her notes as a descriptive adjective of the state of alertness of the patient.

- ◆ Susan Ward, once the managing editor of *Kansas Medicine*, sent me this information from an obituary. "Dr. P died November 2, 1992. Because of this event he is no longer in practice." She can think of no better reason than this to stop practicing.

Sometimes we blunder into obscurity in our zeal to sound learned. For example, Oliver Wendell Holmes chides us for using words like "ligatures" instead of "sutures," for they both stop the bleeding. From France comes another example in Molière's 17th-century play, *The Doctor in Spite of Himself*. In it, a doctor-impostor, Sganarelle, uses meaningless Latin phrases to impress his patients and their families. Sganarelle explains the illness of his speechless (aphasic?) patient as "caused by the acidity of the humors engendered in the concavity of the diaphragm, it happens that these vapors . . . Ossabandus, nequeys, nequer,

potarinum, quipsa milus. That's exactly what's making your daughter dumb." None of this makes any sense, but these words certainly impress his patients. Three hundred years later, we still love to write complex sentences stretching out the trite. But where colorful description is called for, we settle for the bleached palette instead.

- ◆ Witness the following introductory address of a consultant thanking the referring physician. "Thank you very much for allowing me to moderate this rather obese elderly female . . . She is related to have a degree of Alzheimer's disease and...is suspicioned to have constipation and diarrhea."

How about this instead? "I thank you for referring ___-year-old Ms. ___. She weighs ___ kgs. She has Alzheimer's disease, constipation and diarrhea."

The above extracts contain few factual errors and no deliberate misrepresentation. They are probably the products of hurry, fatigue or mistyping. Nonetheless, they are funny and, at times, troublesome. **KES**

The author is a neurologist, and Medical Director at Blue Cross-Blue Shield of Kansas in Topeka. Readers may address correspondence to the author at 1133 SW Topeka Blvd., Topeka, Kansas, 66629.

What James Watson and Howard Hughes had in common

Editor Warren Meyer, MD reviewed *The Gene Wars: Science, Politics, and the Human Genome*, by Robert Cook-Deegan, M.D. (W.W. Norton & Co, 1994, illustrated).

The author became involved in the Genome Project in 1976 while conducting a pedigree study on Alzheimer's disease.

The subject of the study was the Ross family (not their true name), a family based in Oklahoma, but with ties to Texas, Kansas and Nebraska.

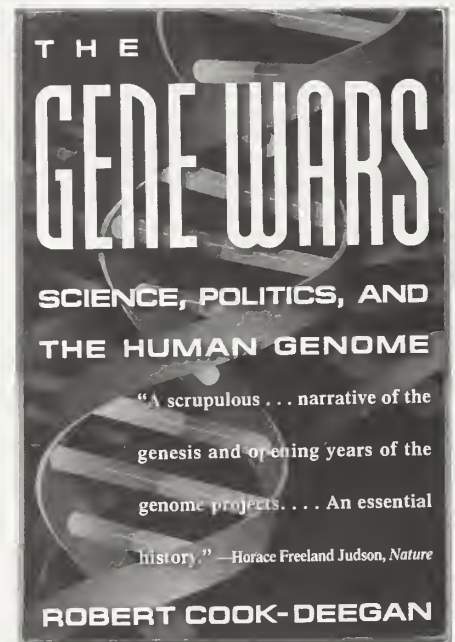
At that time, Dr. Cook-Deegan was affiliated with the University of Colorado. He went on to follow the project as the director of a team from the Office of Technology Assessment from 1986 to 1988, when he left to become executive director of the Biomedical Ethics Advisory Committee, a short-lived committee which dissolved in September 1989. He then worked at the National Center for Human Genome Research, the administrative hub of the Human Genome Project within the National Institutes of Health (NIH), until August 1990. Dr. Cook-Deegan is currently on the staff of the Institute of Medicine, National Academy of Sciences. His background with the Genome Project makes his account of the scientific, political, ethical, and international struggles to make the project work authentic, historical and informative. For the most part, he has been able to remain objective, although his comments indicate his feelings in several portions of this interesting and stimulating book.

The Gene Wars is divided into five parts. The first, "The Scientific Foundation," begins with his pedigree

study and proceeds in a chronological sequence to outline the "why" of genetics in general, through the various steps and scientific advances that made the thought of sequencing the human genome into a realistic possibility. Illustrative drawings explain the human chromosomes, different techniques allowing scientists to identify DNA markers on the genes, the cloning of segments for further study, and automated DNA sequencing techniques. This segment offers a "quick study" of genetics.

The second part of the book, entitled "Origins of the Genome Project," begins with the first meeting focused on sequencing the human genome in 1985, initiated by Robert Sinsheimer of the University of California, Santa Cruz. While this did not materialize into the hoped-for project, the Department of Energy (DOE) had been doing research on the genetic changes in DNA experienced by the *hibakusha* ("those affected by the bomb"), the Japanese survivors of the atomic bomb attacks. A series of meetings among famous scientists created much controversy about the project, but little to advance it. There were skirmishes within governmental departments as well for necessary funding and control of the project. Despite some delays, the project was eventually funded.

The third part of the book details "The Support Structure," and introduces an unlikely character, Howard Hughes. He provided financial support when federal agencies did not respond and covered areas not funded by the NIH. In this remarkable way, Hughes left his



stamp on the Human Genome Project as it was taking off from the runway a decade after his death. In this part of the book, the author also describes the Capitol Hill battles as the National Academy of Sciences redefined the project to include mapping of the human genome, while NIH assumed control from the DOE and became the lead agency in the U.S. genome effort. NIH director, James Wyngaarden, appointed Jim Watson, of double helix fame, to serve as the first director of the Genome Project. This, in retrospect, was the ideal choice.

"Genome Gone Global," describes the efforts to make the Human Genome Project a cooperative effort with other nations. Italy, England, Russia and France were early participants. Germany lagged behind because of the complicity of its scientists with the ideological foundations of the Nazi "racial hygiene" programs, and the Green Movement's distrust of science in general. Japan proved to be a special case; while they were five years ahead in processes and techniques for automating gene sequencing because of their interest in genetic changes in the atom bomb survivors, they—and we—were victims of the U.S.-Japan economic trade wars, which prevented use of their equipment. However, despite all the obstacles, a cooperative effort was forthcoming.

The last part of the book deals with "Ethical, Legal, and Social Issues." The Human Genome Project, thanks to Jim Watson's efforts, had five percent of its budget set aside for a committee named ELSI (Ethical, Legal and Social Issues) to study and make recommendations on concerns raised about the Genome Project. One of its tasks is to change the social framework in which genetics is cast. Another subject in this part of the book is the use of DNA in forensic medicine and the courts, and the decision by NIH to patent chromosomal segments. It is unfortunate that personality differences over the attempts by NIH to patent chromosomal fragments complicated the overall project and led to the resignation of James Watson. By this time, however, the project had taken on a life of its own, and the appointment of Dr. Francis Collins to succeed Watson, hailed by all, assured the uninterrupted continuation of the project.

Perhaps the best definition of the book is contained in its last two paragraphs: "The Watson era of the Genome Project ended as it began, subject to the complex interplay of scientific objectives, positions of political power over biomedical

research, and contending visions. The purpose of the science was to create precise information about human genes and technologies to explain genetic mysteries. Pursuing that purpose, however, was an inherently political process. It involved individuals vying for power to make decisions—players in the drama by dint of their positions in the federal government and in the scientific community."

"The science of the Genome Project is built on facts; its history, on stories."

The book contains pictures of all the important scientific figures mentioned and a chronology of the political events in the genesis of the project from May 1985 through October 1990, as well as an extensive bibliography and acknowledgments. It is probably, as its cover suggests, "an essential history" of the Genome Project. **KMS**

A case of contrecoup vestibular injury

Monte F. Hardin, MA, CCC-A



A 39-year-old male gas production worker was attempting to uncouple a section of frozen pipe he thought no longer to be pressurized. During the course of this activity, the pressurized pipe broke and was hurled some 75 meters into a field. In its course, it struck the worker in the left temporal area, causing an approximate 15-centimeter laceration and immediate unconsciousness.

Another gas production worker over a mile away recognized the sound of escaping gas and began to search for its source. Upon his arrival at the accident scene, he found the victim sitting in his pickup truck, apparently after regaining consciousness and crawling to his vehicle. A pool of blood 610 mm in diameter was noted 20 m from the truck. The patient was transported by EMS to a local hospital, where radiological studies revealed a left temporal bone fracture. His only other complaint was that of being “dizzy” and having a sensation of falling to the right.

After two weeks of hospitalization, the worker was dismissed and returned to his home for further recuperation. Throughout his hospital and home stay, he continued to report feeling “dizzy,” but denied any nausea with vomiting. Since symptoms persisted, his local physician referred him to a neurologist in our geographical area. Neurological findings were negative with the exception of an intermittent left beating horizontal nystagmus. As the neurologist suspected left vestibular involvement, a referral was made to our facility in Hutchinson for electronystagmography (ENG), auditory brainstem testing and traditional audiometry.

An audiogram revealed a severe high-frequency sensorineural hearing loss in his left ear and a mild high-frequency sensorineural hearing loss in the right ear. Speech reception threshold testing confirmed the validity of the air conduction audiogram. The patient’s speech discrimination under quiet listening conditions was normal. Interestingly, the patient did report high-frequency hearing loss prior to the injury, worse in one ear, but he could not remember which. However, he felt his hearing may have decreased in the left ear after the accident.

Auditory brainstem evaluation reflected normal inter and intra-ear latencies with normal morphology, suggesting cochlear hearing loss in both ears without retrocochlear involvement.

Electronystagmography was performed for both positional and caloric-induced responses. In virtually all positions, with the patient's eyes closed, a block or "kip" nystagmus was observed (Figure 1). No true nystagmus with a fast and slow phase was recorded. Surprisingly, caloric-induced nystagmus revealed a right ear unilateral weakness of 22 percent. Warm-and-cool caloric stimulation was perceived by the patient as similar to his "dizziness" but slightly more severe, as the caloric-induced response did initiate nausea without vomiting.

DISCUSSION

Although block or "kip" nystagmus is not in and of itself diagnostic, it has been reported to be seen occasionally in vertebrobasilar insufficiency¹ and arrested communicating hydrocephalus.² More importantly to this case, Battin presents a similar type of block nystagmus occurring in patients with post-concussion syndrome.³

It is, therefore, concluded that block nystagmus in our patient's ENG should be regarded as, or suggestive of, post-concussion sequela. The force of the blow to the left temporal area created a contrecoup injury to the right vestibular system. It is highly probable that, to some degree, the peripheral hearing in the left ear pre-existed the accident, as this much disparity between hearing ears would be very noticeable with acute onset. Certainly, on this patient's behalf, electronystagmography established his complaint of feeling "dizzy" as a non-psychogenic diagnosis. Ultimately, this related to his time away from the job and may have had significance in a worker's compensation claim. **RMS**

Mr. Hardin is an audiologist who formerly practiced in Hutchinson. Correspondence may be addressed to the author at 720 Crestwood Dr. E., Evansville, Indiana 47715. The author wishes to acknowledge the reviewer expertise of Dr. Thomas Smith, otolaryngologist, Hutchinson, Kansas.

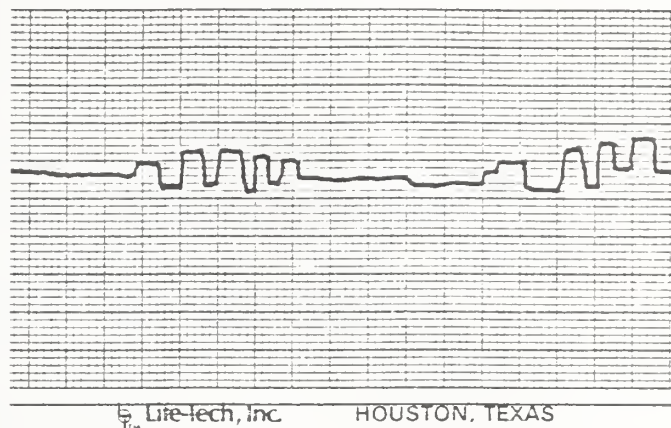



Figure 1. Block or "kip" nystagmus found in all eyes-closed positions.

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Herniated disk: an obscure cause of neurogenic bladder in males

C.H. Hsu, MD, FACS



The obscure vesical dysfunction caused by asymptomatic protruding lumbar disc in the male is rare. In 35 cases reported in the literature, only five have occurred in males.¹ The obscurity and perplexing urological manifestations and the absence of neurological findings usually challenge the urologist in the diagnosis of this condition. Following is a report on the silent neurogenic vesical dysfunction caused by asymptomatic vesical dysfunction in a male patient.

CASE REPORT

F.F., a 28-year-old white male, was admitted to the hospital on October 28, 1991, complaining of terminal dribbling of eight months' duration. He denied any other urological or neurological symptoms. His past history indicated a previous hospitalization elsewhere and urological investigation, including a cystoscopy, performed in June and August 1991. At that time, he was told he had a normal bladder, and that a psychiatric consultation would be of benefit. On admission in October 1991, the physical and neurological examinations were within normal limits. There

was no evidence of any apparent neuropathy. On clinical investigation, the urinalysis, urine culture, hemoglobin, blood chemistry and renal function studies were normal. An infusion pycelogram study was likewise negative; however, a cystometrogram revealed impaired sensation and an enlarged bladder capacity with significant residual urine. A Lapides^{2,3} supersensitivity cystometrogram with 2.5 mg of subcutaneous injection of urecholine confirmed the impression of a flaccid neurogenic bladder. Cystourethroscopy revealed moderate bladder trabeculation but no apparent vesical outlet obstruction or urethral stricture. A tentative diagnosis of neurogenic vesical dysfunction was entertained. A neurological consultation failed to reveal any apparent neuropathy. A myelogram study showed a protruding lumbar disc at the level of L-3 and L-4. A lumbar laminectomy was performed. The indwelling Foley catheter was removed on the fourth postoperative day. The patient was able to void with a satisfactory stream; however, dribbling continued up to the 14th postoperative day. A follow-up after three months revealed normal cystometrogram findings and no urinary symptoms.

DISCUSSION

Vesical dysfunction caused by a protruding lumbar disc was reported by Love and Emmet in 1967 in three women, all with urinary retention.^{1,4} Subsequently 27 cases in females and five cases in males were reported from the Mayo Clinic. The tentative diagnosis was reached by cystometry and confirmed by the myelogram study. It is of interest that in our case a Lapedes supersensitivity test with urecholine was extremely helpful in establishing a tentative diagnosis of neurogenic bladder. In the absence of other causes of neurogenic bladder, a silent protruding lumbar disc was considered. A myelogram and neurosurgical consultation are most helpful, and there must be complete cooperation of the urologist and the neurosurgeon.

SUMMARY

A case of neurogenic bladder caused by asymptomatic protruding lumbar disc has been reported in the male. The diagnosis was established by Lapedes supersensitivity cystometrogram study.^{2,3} After a lumbar laminectomy, the bladder function returned to normal. **RMS**

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Information for authors

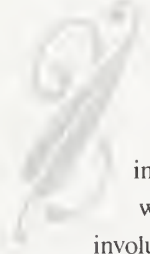
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Mennonite roots of psychiatry in Kansas

George Dyck, MD, and Daniel J. Heinrichs, MD



The Mennonite seeds of psychiatry in Kansas germinated in the fertile lowland soils of Friesland, Prussia, and the Ukraine, where Mennonites in centuries past, as pacifists, sought freedom to worship according to conscience and asylum from involuntary military conscription. This asylum repeatedly escaped them as they surrendered the rich loam they had wrested from the lowland swamps in exchange for a new-found promise of freedom from conscription in yet another country. Late in the 19th century, another generation of Mennonites, for the same reason, came to the plains of the midwestern United States, including Kansas.

They were pioneers intent upon doing what they knew best: farming. They brought with them kernels of winter wheat carefully packed in their luggage. They also came with their centuries-old identity built around their low-German dialect, their separateness from their neighbors, and their conviction that if faith in God is to be valid it must find expression in loving deeds for one's neighbor. To nourish their faith, they first built churches. Later they also built schools to educate their young, and hospitals to care for their sick.

For a time, their compatriots who remained behind in the Ukraine continued to prosper and, out of an awareness of need, engaged in institution-building. One of those needs was for an institution in which to care for the mentally ill of their number. They searched for a model and found one to their liking in Germany.

This was a Christian institution serving both mentally ill and retarded at Bielefeld, and operated by a Lutheran pastor named Friedrich von Bodelschwing. A number of Mennonites trained there, in both nursing and psychiatry, returning to the Ukraine in 1910 to establish Bethania (Bethany).¹

Bethania became a substantial institution eventually housing over 100 patients. Photographs of the buildings and staff document it as a place of stature and dignity. Emil Kraepelin was among its visitors. Kraepelin was a prominent German psychiatrist who described the syndrome "dementia praecox," later known as schizophrenia. The mother of Dr. Elsie Steelberg, a Wichita psychiatrist of Mennonite heritage, served as a nurse there.

Bethania survived the Bolshevik Revolution of 1917 and

the period of anarchy and civil war that followed. After the new Soviet Union quit World War I, loosely organized bands of soldiers returning from the German front pillaged the area's prosperous German villages, inviting targets for both ideologues and those just out to plunder. Though many were killed, more died of starvation and disease, with louse-borne typhus the major threat to life. During this time, U.S. Mennonites' awareness of need by their kin was heightened, in response to which they formed the Mennonite Central Committee, a relief agency which saved many from starvation.

By 1922, the authority of the Soviet Union brought some order to the region. The Soviet government took over the operation of Bethania, although its personnel remained largely Mennonite. A report in the German language periodical *Unser Blatt*² in 1926 noted that Bethania was filled to capacity, able to admit only the most seriously ill. The year-end census was 107. Of the 204

people hospitalized at Bethania in 1925, 101 were Russian, 87 German and 16 Jewish.

The last accounts of the hospital's operation express concern about and then bemoan

Bethania's demise in 1927. The Soviet Union's plans for constructing the Dnieprestroy, a giant hydroelectric dam, destined the area occupied by Bethania for flooding. Some patients were transferred to another hospital, but the staff was not. The Mennonites lacked the resources, and the Soviet government the interest to rebuild elsewhere.

Collectivization largely destroyed the Mennonite communities that remained. Those who had not already fled to North and South America were resettled farther east or interned in Siberian labor camps. The German word used by the Mennonites to describe what happened to them is *verschlept* (dragged in all directions), the same term used to describe a pack of dogs vying for an animal carcass.

The Mennonite seeds of psychiatry in Kansas germinated in the fertile lowland soils of Friesland, Prussia, and the Ukraine.

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MENNONITES IN THE NEW WORLD

The emigrés leaving the Ukraine duplicated in Paraguay and Canada some of the institutions they had left behind. In Kansas, by this time the Mennonites were building general hospitals and homes for the elderly in their communities, but initially there was little interest in facilities for the mentally ill. There is an account of a proposal by Kansas Mennonites to establish an institution for the mentally ill in 1937, but nothing came of it, possibly because few of the Mennonites leaving the Ukraine after the revolution came to the United States.

In the United States, interest in psychiatric treatment was kindled by another entirely different impetus. The Selective Service Act passed in 1940 provided an alternative to military service for conscientious objectors. Initially, Civilian Public Service camps, resembling the Civilian Conservation Corps of the 1930s, became the sites where conscientious objectors essentially replaced Forest Service employees in national forests. Since many conscientious objectors desired to serve over and beyond freedom from military conscription, other options were made available to them in lieu of military service. Acute staffing shortages in state mental hospitals brought about by the war effort made them a good fit for young Mennonite men eager to prove their dedication to service at a time when their loyalty to the nation was suspect.

Between 1942 and 1946, some 3,000 young conscientious objectors, the majority of them Mennonite, spent time serving as orderlies in mental hospitals. These were often crowded, dismal and sometimes frighteningly dangerous places. Philadelphia State Hospital had been built to house 2,500 patients, but had 6,000 with only 200 attendants to provide supervision. In 1950 in Kansas the census at each of the three state mental hospitals ranged from 1,500 to 1,800.

The four years conscientious objectors spent in state hospitals during the war years provided ample documentation for an exposé appearing in the May 1946 issue of *Life*, "Bedlam 1946, Most U.S. Mental Hospitals Are a Shame and a Disgrace."³ The work of the conscientious objectors was one of several streams of reform following World War II. Best known are the crusade for state hospital reform carried by Dr. Will Menninger to more than half the state legislatures in the country, and the work of Drs. C.F., Karl and Will Menninger in the institutions they founded in Kansas.

The Mennonite Central Committee (MCC), which had provided administrative support for much of the service activity of conscientious objectors, sought ways to continue to provide voluntary service opportunities for young people in the church. There was a broad interest in the church constituency in developing Mennonite psychiatric facilities.⁴ Almost every Mennonite community of any size by this time had several members who had experience working with the mentally ill in state hospitals. The model of Bethania in the Ukraine was instructive in helping U.S. Mennonites conceptualize an ambitious national network of psychiatric institutions to serve their own church members.

There were also lingering doubts. Bethania was far removed and did not seem very relevant to them any more. Skepticism lingered about a financing mechanism for such an endeavor, and there was disagreement about whom to turn to for expertise in developing program models. Mennonites were cautious about inviting any outside influence which might serve to undermine their religious faith. There had been bad experiences with the church-founded colleges, which educated young people only to see many leave the church—some, indeed, having become quite antagonistic to the Mennonite faith. Their experiences with some mental health professionals through their experiences in state hospitals did not engender their trust. They certainly did not want anything to do with a Freudian interpretation of their religious faith.

The Mennonites' desire to provide treatment for their own mentally ill finally won out. Their distrust of mental health professionals was not as easily overcome. A smooth working relationship between professional mental health disciplines and the church took years to develop.

A KANSAS TREATMENT FACILITY

Prairie View, the facility established in Newton, Kansas, in 1954, was one of six centers established by MCC across the country.⁵ It started out as a 37-bed psychiatric hospital built with volunteer labor and staffed largely by voluntary service workers. A Mennonite psychologist was hired, but there were no Mennonite psychiatrists available at the time. The board contracted with a group of young Wichita psychiatrists, one of whom was Dr. Tom Morrow, to provide medical direction. He had received part of his training at Friends Hospital in

Philadelphia, the first psychiatric treatment facility established by a church in the United States, and was familiar with the therapeutic community literature that was emerging from Maxwell Jones' work in England.

Prairie View began with its doors locked and relied heavily on electroconvulsive therapy and insulin coma, treatment modalities of the day before the advent of modern psychotropic drugs. Despite early enthusiasm, the community felt increasingly estranged from what looked to them like just another mental hospital. The census declined to a point in 1957 where the board feared closure was imminent. The board believed that the professional staff should become more visible to the public, but with the psychiatrists living in Wichita, this posed a problem. Elmer Ediger, who had been the MCC staff person helping to develop the programs nationwide, became the administrator and hired Dr. Mitchell Jones, who had completed his residency at Menninger, as medical director and sole staff psychiatrist. As a Baptist, Jones passed muster with the Mennonite board. Ediger and Jones together defined the program and carried the message to the local community, and to regional churches, that mental illness could be treated successfully in a caring environment.

This was an era in which the community mental health movement was being defined nationwide. A spirit of optimism regarding the treatability of mental illness was engendered and spread from such places as the nearby Menninger school of psychiatry. By 1964

Prairie View was highlighted in an American Psychiatric Association publication, *The Community Mental Health Center: An Analysis of Existing Models*.⁶ Prairie View had succeeded in defining itself as a community mental health center radiating from a core inpatient therapeutic community. Prairie View had grown in its vision from providing a regional asylum for the Mennonite Community to a mission to the community as a whole.

Prairie View became Kansas' first federally designated community mental health center (CMHC) and, as such, qualified for federal staffing and construction grants. Working together with Topeka State Hospital, Prairie View obtained a demonstration grant for providing aftercare. Prairie View demonstrated that early interventions in the community reduced the rate of readmissions, and by using crisis intervention techniques was able to deflect initial admissions destined for the state hospital. The comprehensive community mental health approach succeeded in substantially reducing the number of patients referred to Topeka State Hospital from the Prairie View three-county catchment area while admissions from the rest of the state were still rising.⁷

The American Psychiatric Association recognized Prairie View with its Hospital and Community Psychiatry Gold Award⁸ for work in reaching out to the community. The National Institute of Mental Health identified Prairie View as one of its model rural mental health centers and sent many visitors its way. Some concluded that the heavily ethnic

community with its stable population was sustaining the community mental health center in a way that could not be duplicated elsewhere. Prairie View restructured its governance in a number of ways to give the wider community a sense of ownership. The board was expanded to include representatives from the community at large, though it remained nominally responsible to the MCC. Each of the three counties represented in the CMHC set up its own advisory board, appointed by county commissioners, to oversee the expenditure of county tax levies. Consultation and educational programs were designed to meet community needs.

When the University of Kansas School of Medicine developed a Wichita campus, Prairie View became a teaching site for medical students and residents in psychiatry. Some graduating students returned to become staff members.

TRoubled Times

Elmer Ediger died in 1983 just weeks after his retirement and some three decades following Prairie View's beginnings. His vision had given cohesion to its mission, and his leadership guided Prairie View's adaptations to the changes taking place in the mental health care environment. Already federal funds for CMHCs were decreasing, and eventually public funding for prevention activities was severely constrained. For some years these activities were subsidized by the hospital, but eventually most were cut back or dropped. In a more competitive environment, the inpatient program could no longer be relied upon to

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generate surplus revenue to support community programs whose costs exceeded income. One of the most deeply felt losses was the clinical pastoral education program which had trained many members of the clergy in the healing influence of the therapeutic community.

Prairie View's operating margin had traditionally been kept low by a board which was opposed to building a depreciation reserve because, in their view, it smacked of profiteering. Hence, little reserve was available for times when the hospital occupancy began to be adversely affected by the reduced inpatient length of stay. The old hospital no longer met the expectations of patients who now had the alternative of newer facilities elsewhere. There was also the expectation of specialized units for specific behavioral problems. A bond issue was marketed to finance a new hospital which was built and opened in 1988.

The staff reluctantly abandoned the therapeutic community encompassing all ages and diagnoses for specialized treatment units. As regulatory bodies and third-party payors became more intrusive, treatment decisions and the structure of treatment programs were increasingly influenced by those who did not have an interest in the unique services Prairie View might have to offer. What they wanted was a standard product rather than the distinctive program Prairie View strived to provide. Some of the changes needed to keep in step seemed to the staff to be regressive, and this required considerable soul-searching as the mission of the organization was reexamined.

As with other Kansas health care institutions, some questioned whether the church should remain involved in what has become a highly competitive industry. Paul Pruyser anticipated this issue when he wrote, "The church-sponsored hospital, if it is to be true to its principles and mission, will . . . have to justify itself by its differences from secular alternatives."⁹ The board of directors and the church elected to keep its ties to the church through MCC intact.

PRAIRIE VIEW TODAY

Prairie View has now passed its 40th anniversary. Where it once struggled for acceptance by its founding constituency, it is now a respected part of the community establishment, valued as an employer which keeps the community healthy. The stigma of treatment has diminished to the point where about

one of twenty people living in the three-county catchment area receive treatment in any one year.

Prairie View's challenge is to redefine its mission to continue the tradition of a caring therapeutic community in a way that justifies its existence as something more than a local mental health center. As in the rest of medicine, the traditions which transcend the commercial enterprise need special nurturing if they are to survive. **KMS**

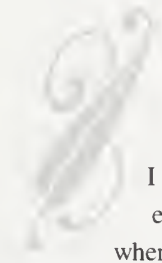
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To tell the truth

Arthur E. Hertzler, MD



A problem which the doctor often must face is whether or not the patient should be told the facts when a cure is extremely unlikely. I was repeatedly informed by ministers in my early days that the sinners at least should be told when faced by a fatal disease so that they could be prepared to meet their God. The average doctor, I believe, is disposed to agree with a statement of Ruskin. "There is but one place where a man may wisely be thoughtless, his deathbed. No thinking should be left to be done there."


The doctor, by the nature of things, focuses on the problem of keeping his patient on this mundane sphere as long as possible and any act calculated to influence this unfavorably is resisted by him. This applies particularly to diseases which frighten the patient, notable heart disease; with proper treatment "heart" patients may have many years of usefulness before them. Therefore, they should not be informed that their condition is serious, certainly not that it is more serious than it really is. The most disastrous results may follow a tactless warning of even the true conditions. The family, or one member of it, may, as a matter of protection to the doctor, be given the true statement of the facts. One must use caution in the selection of the confidant, lest the information be blabbed to the patient, not through viciousness but just through the habit of telling all they know, plus imagination. Patients with goiter hearts particularly are likely to be unfavorably influenced by injudicious remarks as to the seriousness of their condition.

Some patients tell the doctor that they wish to know the truth, and by their bearing convince him that they mean it. I once had a patient of this type, a huge mountain of a man, a noted sheriff of the Southwest for thirty years. His opening remark was, "I am told you tell the truth. I want to know if I have a cancer and if you can do anything for it." I told him he had a cancer and that it was inoperable. After he had dressed, he remarked, "I thank you. What are the charges?" "Nothing," I replied. "Don't do business that way." With this he laid a ten

dollar bill on the table and walked majestically down the hall, head up, shoulders back. He had faced bandits and death many times in his career and he did not fear death from cancer. His magnificent personality lives with me still. He was a man.

Sometimes the situations take on different forms. I once had a fine old gentleman with a cancer of the stomach. I told him that all I could do was relieve, in a measure, his pain. He expressed the wish that his suffering would terminate quickly. He said Christ died to save the world; he only asked to die to relieve his old wife and his daughter the care of him throughout the months to which my prognosis condemned him. Though he would leave them moderately comfortable financially, he had not enough to bear the expense of prolonged care. It would mean that they would have to suffer even after his

passing. Within a few minutes after I left his bedside he drank carbolic acid, with which, unknown to me, he had provided himself before he called me for my last visit. His was a high type of mind considered from every angle. He was actuated by the highest motives. He was not "temporarily insane" as many tried to indicate in

order to excuse his act and he died as he had lived, unafraid, actuated by a desire to extend to his family the final measure of devotion. I am recording a fact. 

The doctor, by the nature of things, focuses on the problem of keeping his patient on this mundane sphere as long as possible and any act calculated to influence this unfavorably is resisted by him.

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Geriatric ethics: responsibilities and conspiracies

Nina Ainslie, MD; William Bartholome MD; and Linda Wolter, MD

The Center on Aging at the University of Kansas

Medical Center sponsors a monthly discussion of the ethical issues of a geriatric

case. The case is presented by a geriatric medicine fellow, and Dr. Bartholome, a pediatrician and ethicist, leads the discussion. The intention is to examine and develop an understanding of the issues involved in the case.

REVIEW OF THE CASE

Mr. E.F. is a 79-year-old man seen for evaluation of slowly progressive cognitive decline and personality change. His family reports memory impairment, unrealistic fears and agitated behavior such as pacing and following his wife around the house. He and his wife live on a farm, where the patient enjoys being outdoors, putting with farm equipment and occasionally playing golf. He still drives and has never been lost nor had an accident. When his wife leaves him alone

at home, he becomes anxious and drives to town to look for her. The wife states that everyone in town knows him and looks out for him. Mr. E.F. is a lifelong gun collector with two unlocked gun cabinets containing many guns.

On exam, Mr. E.F. has no focal neurological deficits. He has difficulty with naming and apraxia. He answers most questions by saying "no" or "I don't know," evading direct questions. He appears embarrassed by his deficits, but states that his family is overly concerned about his memory loss.

Mr. E.F.'s wife and daughter request that he not be told if his diagnosis is Alzheimer's disease. They fear he would become depressed and state he would be "destroyed" if he knew.

DISCUSSION

In Part I of this case, which ran in an earlier issue of *Kansas Medicine*, we discussed the physician's responsibility to protect the patient and the public by

preventing Mr. E.F. from driving and using his guns. In Part II, we will discuss the issue of concealing the diagnosis from the patient. Conspiring to hide a diagnosis from a patient used to be commonplace in both pediatric and adult medicine, especially when the diagnosis was a malignancy. Concealment is no longer considered acceptable, though the reasons have been more practically than ethically based.

Conspiring to hide a diagnosis from a patient used to be commonplace in both pediatric and adult medicine, especially when the diagnosis was a malignancy.

In the first place, it is impossible to completely control the flow of information around patients, so a conspiracy cannot be maintained. In pediatrics, psychologists who were interviewing leukemia patients discovered that all of the children knew they had leukemia. Some were worried lest their parents find out the diagnosis, too, and become upset! These children had learned their diagnoses from other children in the hospital.

In adult medicine, maintaining secrecy about a diagnosis is equally impractical. Before treatments other than surgery were available, it may have been possible to conceal a diagnosis—though patients frequently knew they were dying. Now, however, with chemotherapy and radiotherapy available (and what person doesn't know that these are cancer treatments?), patients must know the diagnosis to consent to and undertake the treatment.

Furthermore, we now know that concealment is destructive. When children were not told of their diagnoses, they were unable to talk about their worries, and often imagined implications worse than the actual situation. When they found out the diagnosis, the children lost trust in their parents and physicians. The rupture in their relationships was difficult to repair.

Depriving adults of information about their disease was destructive for similar reasons. Patients could not discuss their feelings and concerns openly, nor make appropriate plans to complete their lives as peacefully as possible. From the ethical point of view, concealing a diagnosis deprives patients of their autonomy, that is, the ability to

make informed decisions in their own behalf, whether financial, medical or personal.


The situation with dementia appears at first to be different from a cancer patient. It is less clear that the patient will comprehend and retain the information. As the dementia progresses, the diagnosis will become immaterial to the oblivious patient. However, in the early stages of dementia, many people still have the capacity to make plans and decisions for the future. Making an advance directive and designating a surrogate decision-maker are important tasks that mildly demented patients can still undertake.

To deprive a patient in an early stage of progressive dementia of knowing the diagnosis also deprives the patient of the opportunity to make his or her wishes for future treatment known. For any patients who retain some ability to understand their disease and the implications for their future, it is inappropriate to conceal their diagnosis from them. **MS**

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Adenocarcinoma of the anterior urethra in the male

Ossama Tawfik, MD, PhD; Manop Huntrakoon, MD; Mark Noble, MD; Fred Freeman, MD; and Howard Levin, MD



In this paper a rare case of adenocarcinoma in the male urethra is presented. Immunohistochemical studies were useful in differentiating this lesion from the more common prostatic adenocarcinoma.

INTRODUCTION

Carcinoma of the urethra has been known to be the least common among malignancies of the urinary tract in both males and females, especially the former.¹⁻⁴ Adenocarcinoma is extremely rare compared to the more common transitional cell or squamous cell carcinomas.⁵⁻⁷ The diagnosis of a rare urethral adenocarcinoma is usually challenging for the pathologist, particularly in excluding an adenocarcinoma of prostatic origin. We present a unique case of a urethral adenocarcinoma in a 60-year-old male, with a unique histologic pattern. Immunohistochemical studies were used to confirm the diagnosis.

CASE REPORT

A 60-year-old white male complained of a two-year history of dribbling, decreased force

and caliber of his stream, and intermittent gross hematuria. He also reported occasional perineal aching, and pain associated with sitting. Urologic evaluation revealed a 4 x 5 cm perineal mass, anterior to the prostate and distinctly separate from it. The prostate itself was only slightly enlarged and without nodularity or tenderness. The mass extended towards the right inferior pubis and seemed fixed in this area. Inguinal lymph nodes were palpably enlarged. There was no peripheral or scrotal edema.

An intravenous pyelogram was normal. Urethroscopy revealed compression of the mid-bulbar urethra by a seemingly extrinsic mass, and the instrument could not be advanced due to near-total obstruction. A urethral biopsy revealed a poorly differentiated adenocarcinoma, thought to originate either from the prostate or the urethra. The patient was subsequently referred to our institute, where a repeat needle biopsy was performed. The patient underwent palliative urinary diversion followed by pelvic irradiation. Pelvic lymph nodes and urethral margins were negative for tumor. He died thirteen months

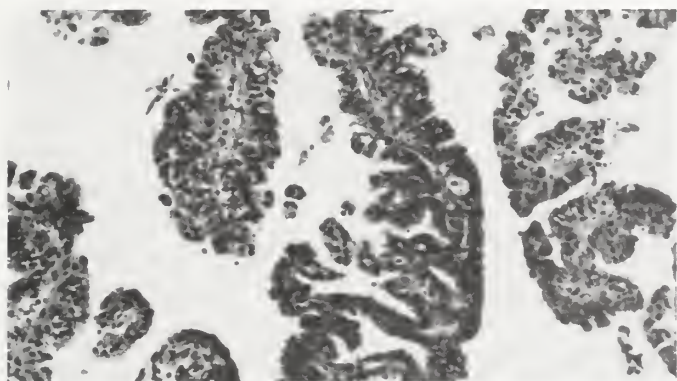


Figure 1. Tumor cells forming papillary structures, reminiscent of the nephrogenic metaplasia (hematoxylin and eosin; original magnification $\times 40$).

later, following progressive malaise due to chronic pain secondary to extensive local metastatic disease.

PATHOLOGIC FINDINGS

The urethral biopsy consisted of four fragments of pale gray-white soft tissue measuring 1.0 x 1.0 x 0.5 cm. In addition to the hematoxylin and eosin and mucin stains, paraffin immunohistochemical studies for prostate-specific antigen (PSA) and prostatic-specific acid phosphatase (PSAP) were also performed. The neoplasm consisted of a complex papillary adenocarcinoma (Figure 1). The fibrovascular stalks were lined by tall, columnar, pleomorphic cells with round to oval hyperchromatic nuclei and prominent nucleoli. The cytoplasm was slightly vacuolated. A proteinaceous material was seen in the lumina of some glands. In some areas, there was a cribriform appearance. Mitotic figures were easily identified in most fields. A repeat needle biopsy showed multiple tumor foci of a less differentiated adenocarcinoma, which had splayed the fibromuscular stroma and occasionally formed glandular structure (Figure 2). Although a papillary configuration was not appreciated, the individual cells looked identical to the ones noted in the first biopsy specimen. The mucin stain was focally positive along the luminal

border of the neoplastic cells. The immunohistochemical studies for PSA and PSAP were entirely negative in the tumor cells.

DISCUSSION

Primary carcinomas of the urethra are rare diseases, comprising less than one percent of all urothelial neoplasms.⁵⁻⁷ Women are usually more affected by the disease, with a male-to-female ratio of 1 to 4. Less than 1,500 cases of primary urethral carcinomas have been reported in the world literature thus far. Adenocarcinoma of the urethra is even rarer. In males it accounts for only six percent of primary urethral cancers, with fewer than 25 cases of adenocarcinomas of the male urethra reported.¹⁻⁴ It ranks last in distribution among the major histologic subtypes of this organ, after squamous and transitional cell carcinomas.

Various origins for these tumors in the male urethra have been postulated, including Cowper's gland,

Littre's glands, prostatic ducts, periurethral glands and, rarely, nephrogenic metaplasia of transitional epithelium. In the present case, the tumor exhibits a papillary and glandular pattern and appears to be arising from the mucosal surface, making a periurethral glandular origin unlikely. The predominant localization of the tumor in the urethra and negative staining for PSA and PSAP render the possibility of prostatic primary site very unlikely. Furthermore, the prostate gland was palpated clinically as a distinct, separate structure from the urethral lesion. Some areas of the papillary component appeared to be well differentiated and are reminiscent of nephrogenic metaplastic lesions. It is quite intriguing to suspect that this tumor might represent the malignant counterpart of nephrogenic adenoma (metaplasia). Mostofi has alluded to this possibility.⁸ Three more recent reports of malignant transformation of nephrogenic adenoma lend further substantiation to this theory.^{4,9,10}

Urethral adenocarcinoma frequently presents as a late-stage malignancy. The

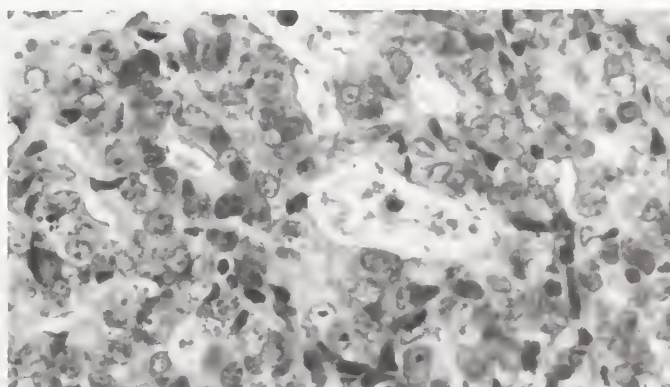


Figure 2. A higher magnification of a solid area of the urethral adenocarcinoma with acinar formation. Nuclei are large with prominent nucleoli. Mitotic figure is noted in the middle (hematoxylin and eosin; original magnification $\times 400$).

ADENOCARCINOMA OF THE ANTERIOR URETHRA IN THE MALE

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prognosis for these tumors is poor, especially the ones arising from the proximal portion of the urethra. Distant metastasis is unusual, and if it occurs it preferentially involves the regional lymph nodes. Death is most frequently secondary to sepsis complicating local ulceration or to fistula formation. Our patient was no exception, despite radiation therapy attempts.

In summary, we have presented an example of a rare tumor. The urologist and pathologist must maintain a high index of suspicion in evaluating patients with urethral strictures to avoid delay and/or misdiagnosis of these tumors. Furthermore, because of the possible connection of nephrogenic metaplasia and adenocarcinoma in this case, a careful histologic examination is recommended to rule out the presence of carcinoma in those rare benign lesions. A critical evaluation and close follow-up of patients with nephrogenic metaplasia of the urethra is proposed. **RMS**

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MSSC Auxiliary receives award

Warren E. Meyer, MD

The 31st annual Kansas Wildlife Federation award for 1995 in the category of cleaning up streams was presented to the Environmental Concerns Committee of the Medical Society of Sedgwick County Auxiliary for their efforts to restore the Armour Branch of Gypsum Creek in Wichita that runs west of Towne East from Douglas Avenue south to Kellogg Street.

The pioneer of the program, which began as a simple gesture to pick up trash along the creek, is Mrs. Sylvia (Fount) Hartley. The once-a-month Saturday cleanups soon expanded by persuading the Target store to build a fence to keep trash from blowing into the creek. A local car dealer stopped diverting its waste water into the streams, allowing small trees and plants to grow. The group even obtained a federal grant to make the area a greenway along the creek's banks and to install a bike path. In short, their efforts have turned a "polluted ditch" into a park which is now a healthy home for small fish, mallard ducks, muskrats, cattails, flowers, and a variety of other plant and animal life.

In addition to these efforts at the creek, the Auxiliary has also worked with other community organizations and local businesses to clean up their own waste disposal practices. The citation reads, in part, "They are vigorously promoting good health in the community by providing an environment where people can exercise, breathe fresh air,

and thoroughly enjoy the environment around them. It is for these reasons that they are honored as the Kansas Wildlife Federation's Stream Team for the year 1995."

The award depicts a peregrine falcon banking over what is hopefully Gypsum Creek (okay, use your imagination). We would like to congratulate the Medical Society of Sedgwick County Auxiliary for earning this award. A story of their stream clean-up team efforts appeared in the AMA Alliance publication, *Facets*, late last year.

Such activities enhance the image of our profession, and focus attention on

the importance of environmental issues in the community. **KMS**

Editor's note: Kansas Medicine would like to thank Dr. La Rue Owen, an avid photographer who has exhibited both nationally and internationally, for making available the slide which accompanies this article.



Medullary sponge kidney

Lorraine Alvarado, MD, and Anne D. Walling, MD



Medullary sponge kidney (MSK) is an abnormality of the intrapylamidal collecting ducts of the kidney. It is usually identified when pyelography is performed for renal colic, recurrent urinary tract infection, or persistent hematuria. The condition is benign unless complications develop, principally nephrolithiasis and infection.

INTRODUCTION

Medullary sponge kidney is a structural abnormality of the renal intrapylamidal collecting ducts. The lesion is usually discovered when IVP is performed to investigate hematuria, recurrent infection or symptoms of renal stone. MSK was identified in a postmortem specimen in 1908¹ and radiographically described by Lenarduzzi in 1939,² but the first complete clinical and morphological description (of “le rein en eponge”) was by Cacchi and Ricci in 1949.²

As MSK is usually a benign condition requiring IVP for diagnosis, its true prevalence is difficult to assess. Estimates have been made that MSK is present in between 1 in 5,000 and 1 in 20,000 of the adult population, with males and females equally affected.^{1,4} In patients attending urology clinics, MSK has been estimated to have a prevalence of 1 in 1,000,⁴ but this rises as high as 20 percent when aggressively sought in these selected patients.² MSK is identified in approximately 0.5 percent of patients undergoing excretory urography.³

ILLUSTRATIVE CASE

A healthy 41-year-old white woman was noted to have experienced up to four “urinary tract infections” per year for over a decade. Not all of these incidents had been well documented, but several urinalysis reports showed mild hematuria in addition to bacteriuria. Two urine samples taken when the patient was asymptomatic and not menstruating also revealed microscopic hematuria. Complete physical examination and initial laboratory testing (BUN, creatinine, PT and PTT) were all normal. An IVP (Figure 1) showed the classical “bristle pattern” of MSK.

PATHOLOGICAL ASPECTS

As the diagnosis is based on radiographic appearance, many cases of MSK are believed to remain unrecognized, and theories of pathogenesis are based on an incomplete and probably biased sample of people with the condition. Currently MSK is believed to have a hereditary basis.² Evidence for MSK being a developmental anomaly includes the occasional finding of familial patterns, the frequent coexistence of other anomalies of the renal tract, and the association with other developmental abnormalities, particularly congenital hemihypertrophy, Marfan's syndrome, and Ehlers-Danlos syndrome.^{2,4} Histologic appearance and the stability of the lesions over time also point towards a developmental etiology. Alternative explanations of the pathogenesis of MSK are of blockage or damage to collecting tubules by either uric acid crystals or as a result of hypercalciuria.²

The kidneys are usually of normal size and shape with pathological changes in uncomplicated MSK confined to the medulla. One or more papillae are affected, and the changes are bilateral in 70 percent of cases.⁴ Affected papillae contain dilated ducts and tubules associated with cysts, ranging in diameter up to 7.5 mm.² These cysts may contain dry or jelly-like apatite material or small calculi.^{2,4} Additional pathological changes may be present due to complications of MSK, particularly infection and nephrolithiasis.

DIAGNOSIS

The diagnosis of MSK is based on the renal appearance during IVP. Minor degrees of MSK may be missed on IVP. The sensitivity of diagnosis is greatly affected by technique. Overlying bowel gas shadows and obstruction of the urinary tract may obscure radiographic changes. Contrast medium in the dilated collecting tubules produces linear radiations which have been likened to the bristles of a brush (Figure 1). If cyst formation is dominant, clusters of spherical lesions will be outlined giving the appearance of "bunches of grapes or bouquets of flowers."² Enlarged papillae and evidence of nephrolithiasis, particularly small stones in the pyramids, may also be found. The differential diagnosis includes all causes of nephrolithiasis and/or papillary cavitation such as renal tuberculosis, renal papillary necrosis and pyelotubular stasis.²



Figure 1. IVP of illustrative case, demonstrating classical "bristle-brush" pattern of medullary sponge kidney, especially in left collecting system.

CLINICAL FEATURES

An unknown proportion of cases of MSK remain completely undiagnosed and/or asymptomatic. Those patients who are recognized usually present between ages 20 and 50 years because of a complication of the condition. One estimate is that approximately half of the recognized cases present as renal colic, and up to one-third as urinary infection. The remaining cases are detected during assessment of hematuria or because IVP was performed to assess hypertension, abdominal complaints or other suspected pathology.¹

The presentation and management of complicating conditions is similar to that of those conditions in patients without MSK. In young patients presenting with nephrolithiasis, MSK may be suspected if a large number of small stones are detected within the kidneys.²

Several biochemical abnormalities have been reported to have a high prevalence in patients with MSK, but it is unclear if these result from complications, particularly nephrolithiasis or infection, or are features of the condition. Patients with MSK are reported to have a high prevalence of impairment of urinary concentration, decreased ability to acidify urine and high fractional excretion of sodium. Proximal tubular function is usually normal, and routine urinalysis is normal unless complications are present. Hypercalciuria is very common in MSK, occurring in between 30 and 50 percent of diagnosed

MEDULLARY SPONGE KIDNEY

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cases. The cause of the hypercalciuria is uncertain.

Investigations have suggested leakage from abnormal tubules, increased intestinal calcium absorption and hyperparathyroidism. As with other features of MSK, it is difficult to separate cause and effect and avoid conclusions biased by identification of predominantly more severe cases with complications.

Clinical management emphasizes minimizing complications. MSK patients should be counseled that the condition is benign but requires regular monitoring to avoid morbidity from potential complications.⁴ The prevention and treatment strategies for these conditions, principally nephrolithiasis and infection, are identical to those advocated in patients without MSK. Patients with a tendency to form stones should be advised to maintain urinary excretion of at least two liters daily and may benefit from thiazide diuretic therapy.² Oral phosphate therapy has been suggested as an alternative to thiazides in patients with normal urinary calcium excretion and no infection.^{2,4} Some authors advocate periodic urinalysis and culture in asymptomatic patients.

Uncomplicated MSK is believed to have a benign prognosis, and progression of the disease is uncommon. Up to 10 percent of patients are reported to have poor long-term prognosis attributable to complications such as recurrent nephrolithiasis and infection.⁴ This estimate is influenced by older studies² and may reflect a less aggressive approach to prevention of complications. **MS**

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Self-help groups and health care reform

Tim Scanlan, MD, and Greg Meissin, PhD

Over the last decade, self-help groups have increasingly become part of health care. Today there are self-help and support groups for many health problems, addictions and traumatic life conditions, as well as groups for caretakers and parents. Self-help groups are composed of people who share the same problem, life situation or crisis, and might best be described as mutual-help groups. People find in self-help groups individuals much like themselves who are able to share pragmatic insights based on their first-hand experience with the same situation, and as a result tend to find more positive approaches to their problem.

Research conservatively estimates that 6.25 million Americans are currently using self-help groups, and that as many as 15 million have been involved in a group sometime in their life. Most experts believe the figures are closer to 10 million active members, with as many as 25 million Americans having used a self-help group at some time in their lives. In Kansas alone, there are almost 2,000 groups accessible through the Self-Help Network, a statewide clearinghouse operating out of the Department of Psychology at Wichita State University. Research conducted by the Self-Help Network estimates that over 50,000 Kansans are involved in such groups at any given time. At the same time, there are thousands who could benefit from membership in a self-help group but do not know they exist or how to access them. How will the ongoing changes in health care affect the use of self-help groups in the future? It is difficult to understand the role of these groups without discussing the broader topic of health care reform. It is also important to recognize that when we hear of health care reform, we hear primarily about what is going on legislatively in Washington or Topeka, but actually it is occurring rapidly in the marketplace with little influence from our political leaders. Society in general, and business specifically, continues to demand more accountability of the health care provider in terms of outcomes, while improving access to all—and at a lower cost.

To understand health care reform, it is important to consider how health care has been paid for and how that is changing. Episodic care to treat acute illnesses on a fee-for-

service basis has been the dominant way health care has been provided. This approach has, in part, increased demand for health care. The system has also become very specialty-oriented, contributing to increased cost. Health care reform is trying to re-orient medicine back to primary care services using specialists only when the primary care physician judges specialized treatment is needed. In 1991, 67 percent of health care was still fee-for-service, but just two years later it was down to 50 percent, and that trend will continue to shift towards both preferred provider organizations and health maintenance organizations, generally referred to as managed care programs. As we enter the 21st century, 80 percent of the population is predicted to be in a managed care provider situation, most with a capitated (prepaid) health care plan. Consequently, the development of large health care organizations that are vertically integrated will provide care as outlined in

contracts based on a prearranged cost per person per year for a specified array of services. Since the provider will be required to deliver necessary services to all patients identified in their contract, they will develop strategies that efficiently diagnose and treat those with health care

problems. At the same time, insurance companies and corporations are going to look for documented outcomes such as improvement of the health of the insured population, and reductions in cost.

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GROUPS CAN IMPROVE OUTCOMES AND LOWER COSTS

Self-help groups, as one component in a continuum of care, can increase positive outcomes at no additional cost.

SELF-HELP GROUPS AND HEALTH CARE REFORM

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These groups are cost-free, and finding out how to access them is also free through self-help clearinghouses. Two decades of research on the effectiveness of self-help groups has found that they can positively alter a patient's course of illness, influence patterns of hospital use, reduce mortality rates and prevent relapse. Self-help groups are readily available for a diverse set of health problems, for as long as a person wants, and regardless of ability to pay.

It is anticipated that health professionals will see referrals to self-help groups as a cost-effective adjunct to prescribed health care services once they appreciate how useful they can be to some of their patients. The education of health care professionals about the usefulness and efficacy of these groups presents a challenge to clearinghouses. The Self-Help Network of Kansas will assume a role in this process as it tries to carry the message to the state's health care providers and participates in self-help research.

Unfortunately, self-help groups are often viewed with skepticism, and many professionals do not recognize them as the useful adjunct they are. Others simply view the approach of such groups as "new age psychobabble." In reality, people find support from individuals who have gone through the same experience. While the emotional support found in self-help groups is important, the detailed and accurate information about their disease and the understanding of the local health system found in the collective experience of the members is probably just as important. The more knowledge that health care providers have about self-

help groups and the more they interact, the more likely it is that they will find these groups a useful adjunct to treatment.

CHANGING HEALTH-RELATED BEHAVIOR

Many experts believe that we will see more focus on prevention and health promotion because it is ultimately less expensive to keep people healthy. However, this will be a huge challenge because of the obvious requirement that people take more responsibility for their health and actually change their health-related behavior. Unfortunately, our current system does very little to encourage individual responsibility. It is important to recognize that self-help groups are based on people taking personal responsibility for their own situation, while also helping other members of the group. Studies have found that persons in self-help groups are better at following medically prescribed courses of treatment, show improved lifestyle changes suggested by their physician to prevent relapse, and are less anxious and depressed regarding their illness. People are also more likely to go to a self-help group if referred by their health care provider.

Kansas is a unique place for self-help. There are more self-help groups per capita in this state than in any other, and the Self-Help Network has made nearly 20,000 referrals to self-help groups in the last two years, more than in any other state except one. Kansans are strong, self-reliant people who

possess a spirit of volunteerism and a willingness to help their neighbors. This "natural resource" is really what self-help groups are about, and why they are so prevalent in Kansas—helping others who share one's situation while helping oneself; responsibility for oneself and responsibility for others. A critical component of health care reform is how to get the American people to take more responsibility for their own health. In their quiet, grassroots manner, meeting in church basements and hospital conference rooms in virtually every community, self-help groups will play a role and be an asset in this transformation. **MS**

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The doctor and his fads

In casting about for a subject, when in an unthinking moment I promised to write a paper for this meeting, thoughts like these

filled my mind: "I am too

young and inexperienced," for I enjoy the distinction as well as the inconvenience of being the "kid doctor" in a town whose medical men are all young. "I can cram my brain full of other men's ideas, and pass them along, half clothed, to a long-suffering and patient class of men, and they, out of the kindness of their hearts and pity for my weakness would probably not kill me, so my life would be safe; but doctors have enough to stand without me giving them any pseudo-scientific hash."

While these thoughts crowded themselves into my busy hours and occupied my leisure moments, I realized how hard it was for a young man to say anything to interest those of much wider experience. I went to lodge one evening and there was a candidate to initiate, and after the victim had been raised to the sublime degree of "grand high bumper," and order restored, the late candidate looking bewildered and nervous, hardly knowing whether he was really a full fledged member of the Eminent and Royal Order of Shanghais or not, the presiding officer arose and in solemn tones and great dignity spoke as follows: "It is always customary at this point for the new member to make a speech and tell us what he thinks of the order, and how he likes it thus far." And as I sat there I said to myself an epitome! I am the new member and the medical

profession of Kansas has asked me to write a paper, and I cannot do better than to tell how the profession appears to me, and how I like it, so I shall occupy a few minutes speaking about the doctor and his fads.

It is generally supposed that medicine is a science. I was taught that, I have heard doctors of wide experience say it was, and yet, to hear those same men talk and see them act makes you doubt it, or at best allow that it is as yet in the embryonic state. After all their knowledge and drill, doctors are turned about by each new wind that blows as are the laity. One is forced to the conclusion that there is more in medicine than scientific knowledge, and that the best practitioners are often not the most scientific.

I have known skilled surgeons to refuse to operate because they could not have made what they considered the necessary

arrangements and offer as excuses, "have not the proper instruments;" "the place is not fit;" "it would be criminal to operate, on account of danger of septic infection," and the patient dies without an effort to save him. They were scientific, but not up to what the practicing surgeon or physician should be. They failed when an emergency arrived. Yet I knew of an undergraduate

"Lest we forget" is a new department which reprints excerpts from past issues of Kansas Medicine. This issue's selection was written by J.R. Scott, MD, and first appeared in the June, 1895 issue of the Journal.

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THE DOCTOR AND HIS FADS

Continued from page 35

living in the knobs of Kentucky, at the hour of midnight, without medical assistance, amid surroundings wholly unfavorable, by the light of a smoky lamp, without tube and with few instruments, successfully perform a tracheotomy and save a child's life. Another in a backwoods district of Mississippi with a pair of tweezers and needles and thread from the work basket of a grandmother stop the blood and close the wound of a would be suicide who had cut his throat with a razor, and the wound healed by first intention too. Another, in like locality, from an old umbrella steel, with a hammer, axe and file manufactured a uterine curette which he needed and did not have time to send for and his patient recovered as readily as if it were shop made. I don't want to be understood as crying down scientific knowledge and investigation; but there are such things as scientific stupidity and plain horse sense in the practice of medicine. I have also observed that the doctor who can spin out the longest Latin names and give in technical language the physiological effects of drugs and the pathology of disease, is not always the one that cures the most cases.

As in other lines, it is the man that gets there, "That hits the spot," that people want, whether he arrives at the proper solution from scientific deductions, horse sense or intuition.

Some doctors know how but can't do; others can do but can't tell why.

In the other sciences, when a new discovery is made it is a fact and remains a fact; but in medicine this year sees many of last year's facts relegated to the rear, only to give way to new facts which in their turn will be given a place beside the blue glass and other extinct crazes. The time was when medical men were too narrow; they could not be moved from the beaten paths of their predecessors. Now let a new idea get into print, particularly if it has the savor of Limburger and bologna, and nearly every doctor is after it like a flock of sheep following the bell-weather over a fence, in fear lest they be called "old fogey" by the so-called progressive medical men.

A number of years ago these ultra-progressive fellows heard something about antiseptics in surgery. You know germicides were all the rage and the progressive men were all off on a chase after some new poison to kill microbes, they traveled so fast to keep at the front that they did not have time to think or they might have discovered what the old fogies did,

that absolute cleanliness was the basis and foundation, not bichloride of mercury. Now the progressive men, to use a slang expression, have "come off the perch," but the principle of treating wounds aseptically still lives.

Another fad that followed was the mania for removing ovaries; these same antiseptic surgery men started off and if a woman ever complained of pain in the ovarian region a laparotomy was advised. Every young surgeon considered it the acme of fame to have done one. Surgery received valuable lessons and much knowledge was given to science; but many a woman was unnecessarily unsexed to satisfy the craze.

You all remember what a furor Koch's lymph caused. The newspapers took it up first and reports were all in its favor. The progressive fellows got in the swim again. The microscope became an absolute necessity as a means of diagnosis, all the doubts and uncertainties in medicine were going to give way before bacteriology, in fact a revolution was close at hand; the deep things in pathology were to be revealed. It was proved beyond doubt that the tubercle bacilli caused consumption, and reasoning by analogy all

disease was produced in the same way. Now they say, "The microscope has reached the limit of its usefulness, and to chemistry we must look for all future advancement. We are not so sure as we were about the bacilli being the cause of the disease, perhaps it is the effect." Meanwhile the men designated as behind the times, have gone slow and picked up the facts their hasty brethren did not have time to see, and are able to diagnose and treat a case of tuberculosis as successfully as the up-to-date man.

Then there is the communion cup fad that has been discussed in the sacred and medical press. No case is cited where disease has been communicated; but the danger, the possibility, is appalling to these progressive fellows and, while speaking, they place between their lips a cigar moistened by lips and rolled by hands far more liable to be polluted by contagion; still they wonder how good church people can take such risks. There may be danger, but there are many other

*Some doctors
know how but
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others can do
but can't tell why.*

customs where the danger is greater. Clean out the dirt first, do the dusting afterwards.

Then there are fellows that profess to believe disease is spread by kissing. Poor fellows, it only shows where they go for their caresses. There are lips so enchanting that a microbe would expire in ecstatic delight should he linger on their rosy surface the fractional part of a second.

Kissing is dangerous, Warden Chase and Senator Householder have found that out; but it is not because of any contagion.

Brown-Sequard started the pace in 1889 for a stampede to animal extracts with his elixir of life. And today we have the spectacle of one of America's foremost neurologists at the head of a company that is running opposition to the Erie Medical Company, restoring weak men by injections of that same old elixir under a new name, and to Dr. R.V. Pierce in the treatment of diseases of women by a like process.

The latest fad is diphtheria anti-toxin; judging from newspapers and certain foreign medical journals it is a grand success. Those booming the new treatment tell how the death rate has fallen off, those against how mild the epidemic has been and that, with the other treatment should get the credit. The preponderance of evidence seems to be that the serum craze will soon go the road of tuberculin and that chemistry will drop back alongside the microscope as one, but not the main factor in the diagnosis and treatment of disease.

As a novice I can not see why the American doctor will cry down Paskola,

the Keeley cure or Amick's consumption cure or any of the American fakes and take so kindly to those of foreign birth.

In the whole realm of medicine there seems to be an element of credulity and speculation only rivaled by the famous Mississippi Bubble in the early part of the eighteenth century. The condition of medicine today reminds one of the boom times in Kansas, every doctor expects to die famous. The boom will burst one of these days, speculation will stop, credulity will be replaced by common sense, medical men will not become wild over each advance in their science.

Doctors will become what they should be, hard headed men with wide knowledge and a disposition to prove all things and ever ready to advance and perfect their knowledge in medicine. The great discoveries yet to be made will be tested by time and careful, patient investigation and rise like the morning sun growing clearer and stronger as time advances only to set when this material world and the necessity for medical knowledge shall have passed away. Not like a rocket on a Fourth of July celebration rises quickly to the zenith leaving behind a trail of sparks, explodes and disappears in the darkness.

The science and art of medicine has made a very rapid progress in the last twenty years. We have kept such a pace that some of us are dizzy; we have often spoken when silence and more investigation would have prevented our being laughed at by our patrons. The world at large are a shrewd set and when they see grave and dignified professors taking up and advocating a theory, and

proving it to be the correct one beyond all question and then repudiate it in a few months or years as being absurd and untenable, there is but one conclusion: "Doctors are either knaves or fools." **RMS**

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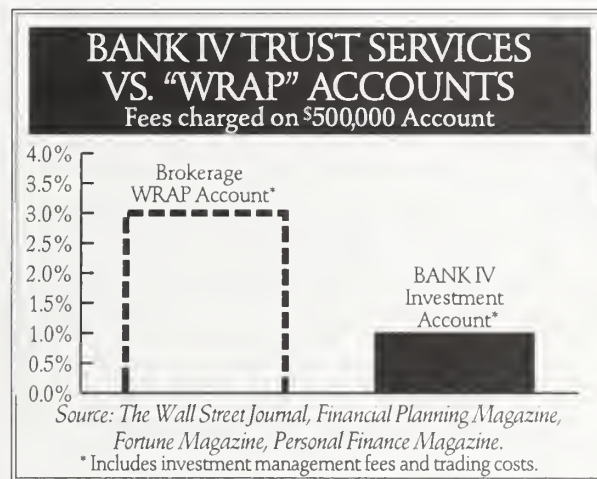
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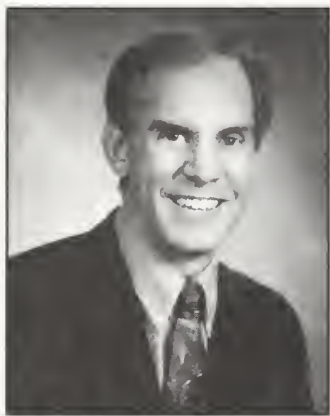


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KMS President's inaugural address

David Ross, MD



Dr. Ross's address was presented to the House of Delegates at the 1996 Annual Meeting on May 5.

When Jerry Old and I first went into practice in Arkansas City, we quickly became involved in a lot of practice

management problems that we, like most doctors starting out, had not really anticipated. We had to purchase equipment, establish billing and collection procedures, resolve personnel problems, decide whether to participate with Medicare, etc., etc. Within a short period of time, we started to practice a very simple principle (today, it would be called a paradigm). We believed in the simple idea that if we did what seemed right and would appear to be the best deal for our patients, in the long run it would also be best for us. As long as we followed that dictum, we were never sorry.

As the years went by our practice grew, more partners were added, and life became more complicated. We were more sophisticated, but we had more points of view to consider and even more difficult questions to confront. Keeping up with changes in the practice of medicine was our main interest, so trying to stay on top of the changes in the business of medicine was frustrating, indeed. People who were our friends in the past, sometimes became our adversaries. We had to establish new relationships with insurance companies, hospitals, PPOs, HMOs, Medicare, Medicaid, and even with our own patients. We also learned to deal with lawyers, lots of lawyers.

In April, I attended the AMA Leadership Conference in Washington, D.C.. There were hours of very thoughtful presentations and debate on managed care, physician compensation, medical ethics, government

policies, and many other interesting topics. These were presented by people who have examined these issues in far greater depth and detail than I would ever hope or want to achieve. After giving some thought to all that sophisticated analysis, however, I heard nothing to change my original belief that putting my patients' interests first would, in the long run, be best for me. The Kansas Medical Society itself was founded on a similar principle. Our bylaws state that, "our object is to unite the medical profession of the state of Kansas in promoting the science and art of medicine and protecting the health of the citizens of the state." We exist to promote our patients' best interests. Now herein lies the trouble! We, as individual physicians, face more and more problems—not just medical problems—but managerial, political, and ethical problems. Some of these dilemmas are so complicated it is often hard to decide which course of action will, in the long run, be the best for our patients.

This environment creates a great opportunity for us as a medical society. We have important issues at hand. What we do in the next few years is going to make a difference.

What are some of the issues that we need to focus on this year? Certainly one of the advantages of following a strong leader like Linda Warren is that there are enough projects and issues already on the table to fill up an entire year. The Interspecialty Council, the KMS-KUMC Liaison Committee, changes in the KMS publications, the development of the western Kansas office, the work of the Task Force on Practice Issues, and the establishment of the KMS Foundation are all very significant programs which must be continued. There are very important legislative efforts in progress that could potentially have

major impact on the problems of insurability that many of our patients face. We need to keep abreast of these developments and, as patient advocates, influence them when possible. The antitrust relief legislation we support could make huge differences in the types of managed care organizations created to keep our costs low and quality high.

From discussions at our annual meeting, I identified several new areas of interest that need to be pursued by KMS. We need to take a hard look at the Board of Healing Arts. The status quo does not appear to be acceptable to most of our members. There is an increasingly burdensome problem of credentialing with which our members need help. We need to deal more effectively with the end of life issues, i.e., the physicians' role in the dying process.

It is critical that physicians, rather than the courts, deal with laws concerning physician-assisted suicide. The 9th Circuit Court of Appeals in California failed to find a distinction between withholding and withdrawing life-sustaining treatment and a physician-assisted suicide. The Second Circuit Court of Appeals in New York similarly found laws criminalizing physician-assisted suicide to be unconstitutional, and the court found no distinction between the physician's ability to withdraw life-sustaining treatment and the ability to administer life-ending measures. By that twisted definition, many of us would have performed physician-assisted suicide. Clearly, that sort of conclusion was not reached by someone with adequate experience in dealing with dying patients. Physicians

need to be involved in this issue, or drastic mistakes may be made.

Another issue that we have to deal with falls into the category of what I would call "growing pains." With the formation and growth of KaMMCO, MSC, Heartland Health, and now MedLaw, we have seen occasions for some of our members to very appropriately question whether the actions we're taking could eventually run counter to the basic mission of the KMS. You'll remember that our bylaws start with the words, "to unite the medical profession of the state of Kansas . . ." Many of you may not know that we have already formed the KMS family of companies mission group, consisting of representatives of KMS, Heartland and KaMMCO. Meeting twice a year, the committee plans to discuss and promote cooperation and common purpose among these organizations. It is our intent to make sure that we do not forget that all of these companies have been formed to improve the practice of medicine for the physicians of Kansas and to promote better health care for the citizens in Kansas.

I am very excited about the possibility of a statewide MSO. I think it is very important that the Medical Society be able to provide an option for those physicians who might not want to sell their practices to a managed care organization, but don't want to risk being "losers" in the world of managed care. I do not think it's important that MSC owns a lot of practices, but I think being out there as an option will help everybody in the state much the same

way that KaMMCO has improved the malpractice situation in Kansas for everyone, by bringing competition into the market.

Right now, I feel like the Kansas Medical Society is a big ship, cruising along at full speed ahead on an exciting journey. I'm excited about the fact that this year I get to be the captain. I specifically choose the analogy of the ship's captain because the captain spends a lot of time eating with the passengers, and explaining the ship's features. The helmsman, however, is the one actually driving, and the crew are busy doing all the unseen things it takes to keep the ship afloat. I am here to tell you that we have ourselves one fine helmsman and a heck of a crew. Thanks to them and all of you, we are off on an exciting course. We just need to always stay focused on where we started, where we are going, and why we began our journey. **KMS**

KMSA President's inaugural address

Carolyn Harrison



Mrs. Harrison's address was presented at the President's Installation at the 1996 Annual Meeting on May 4.

I remember as a young girl, admiring the quilt on my grandmother's bed on Sundays when we would go to visit her. I would admire the colorful patches stitched together by hand, and the beautiful decorative quilting threads that made a design in the quilt. I grew to enjoy her patchwork quilts the most, because they could be made of many different patterns of fabrics, and pieced to make beautiful displays of art. The Alliance and the Medical Society are in a way like a patchwork quilt. People are linked together in the medical family. The pieces of the patchwork quilt represent all the different people of our organizations. We are individual in our attitudes, our lifestyles and backgrounds, yet we share so much of what happens in medicine today.

We are connected by a common thread, and that common thread binds together the four areas of the Alliance that I would like to focus on tonight: AMA-ERF, Health, Legislation, and Membership.

The Common thread of interest in our medical schools and our concern about the future of medicine can bring the Alliance and Medical Society together to raise funds for the American Medical Association Education and Research Foundation. The total of last night's auction (over \$11,000) and the past year's total (over \$45,000) will help to fund international studies, students' emergency needs, and the medical school's excellence fund. We thank all of you for your continued support.

The Alliance will continue to build a relationship with both campuses of the University of Kansas Medical School, and to educate the students about AMA-ERF funds. AMA-ERF funds, "help the medical student of

today become the doctor of tomorrow." We hope to increase the funds collected this year, and the Medical Society can help us through Holiday Sharing Card Sales and attending auctions like the one last night. There is no other charitable organization that helps support the future of medical education except AMA-ERF.

Sharon Scott, President of the AMAA, stated in her installation address last summer at the AMAA Annual Session that, "Just as our physician spouses save lives every day through their skill and knowledge, so do we, as members of the Alliance, through our volunteer efforts."

Let me illustrate this by telling you of several Alliance health projects in Kansas that perhaps saved lives. In 1962, Bertha Milbank, President of the Medical Society of Sedgwick County Auxiliary, initiated a program of the sale of car seat belts. (Cars did not come equipped with seat belts at that time.) Bertha, being the good mother she is, and the good Alliance member concerned about the health of Kansans, purchased two seat belt sets for her daughter and new son-in-law for wedding gifts. Their first visit after the wedding, Bertha was pleased and amused to find that her daughter and son-in-law had installed the seat belts, one for the driver's seat and the other, not in the passenger seat by the door, but side by side in their vehicle. Perhaps this project saved a life with the hundreds of seat belts sold.

Many years ago, polio vaccines that saved lives were given with the assistance of Alliance members. Dr. and Mrs. Bill Cauble of Wichita, and Dr. and Mrs. Kenneth Gimple of Topeka, have shipped medications to save lives in other countries. This summer, Dr. and Mrs. Gimple will be going to the Ukraine thanks to contributions from their community,

their church, and the Medical Alliance. Our Alliance publication, the *Communiqué*, will carry a story of their experiences.

The Kansas marriage license application now requires the signatures of the prospective bride and groom after they read a statement about domestic and family violence being a crime. Thanks to Terrie Browning and her efforts, lives may have been saved.

We are bound by a common thread—just as our physician spouses are concerned and challenged by the health of Kansans, so are we as members of the Alliance. At our fall conference, we will focus on environmental concerns and women's health. The Alliance will continue to work on organ and bone marrow donor recruitment. There are many children and adults still waiting for someone to be a hero.

Our 18 county alliances are bound by a common thread of concern about health issues within their individual counties. Some will work on prevention of teen pregnancy, breast cancer awareness, education about alcohol and drug abuse, bicycle safety, support of International Health, immunizations, and support of the Caring Program for Children, a plan to provide health care coverage for children.

The largest piece of the health patchwork is an effort of the Kansas Medical Society Alliance to join in a nationwide AMA Alliance health promotion called SAVE, which is an acronym for Stop America's Violence Everywhere. The common thread of concern about violence can become a vital part of our mutual efforts across the

state to spread awareness of this terrible epidemic and to provide support for victims. The Alliance will share information with physicians and their families about how physicians can often be the lifeline to a domestic violence victim.

Dr. Lonnie Bristow, current AMA President, will address the fall KMS Alliance conference in Wichita on the topic, "How physicians can effect domestic and family violence." Dr. Bristow is also scheduled to address a Wichita middle school of at-risk students, and the Rural Physicians Advisory Committee, as well as medical students at KU Medical School-Wichita. All of you are invited to hear Dr. Bristow on the evening of September 26 in Wichita. Information will follow in the KMS and KMS Alliance publications.

Other plans to focus on violence prevention include the distribution of the flyer, "Hands are not for hitting." These are educational tools to be given to preschools, doctor's offices, or women's shelters to emphasize conflict resolution and nonviolent behavior. We will also promote, "I can choose" coloring books to educate children about conflict resolution. Family care physicians and pediatricians may wish to have their spouses obtain these booklets to give to their patients. They are available from any Alliance Board member, and can be ordered from the AMA Alliance.

We can add another patchwork piece—legislation. The Kansas Medical Society Alliance will work jointly with the medical societies to educate our families about legislative issues. This

year, "Get out the Vote." will be our common thread of commitment. We will work to have voter registration drives run by our Alliance members at community hospitals, and to contact physicians and their spouses who are not on the rolls of registered voters.

In February, at our, "Day at the Capitol" in Topeka, we will put the Alliance tagline, "Dedicated to the health of Kansas" into action. We will do blood pressure screening, distribute information about breast cancer awareness, and share information about domestic and media violence.

We will continue to build mini-internships through the medical societies and the communities in which we live. This is a program where physicians are "shadowed" by community leaders, legislators, etc., for one day to see how health care is provided, and it is an important way for physicians to share the reasons they went into the practice of medicine. A micro-mini internship will also be done on, "A Day at the Capitol" where Alliance volunteers will follow legislators throughout the morning to learn what it is like to be a Representative or Senator.

A most important piece of the Alliance's future is membership. Since I did not grow up in a medical family, my thread in the medical family began when I met Paul in his last year of medical school. On his first day of rotation on obstetrics, in his haste to be on time to meet his staff physician, he left his antique pocket watch in the dressing room. The watch was given to the new OB head nurse. I locked up the watch for safekeeping, and later when Paul

KMSA PRESIDENT'S INAUGURAL ADDRESS

Continued from page 43

asked if anyone had turned in a pocket watch, I asked him to describe it. After describing the watch down to the intricate detail on the watch cover, I returned the watch to the rightful owner. Many weeks later, after watching Paul give attentive professional care to the patients on my unit, I knew there was more than the antique pocket watch that I liked about this physician, and I joined the medical family.

I later joined the Wichita Residents' spouse group to develop some friends in Wichita. I joined a wonderful supportive group, many who I treasure as friends today.

We are working with a changing membership today. Many of our members volunteer with other community agencies, attend college, devote time to their place of worship and their childrens' schools. Some Alliance members fulfill a very important job as mother, or work full-time or part-time outside the home. Some are physicians married to physicians. With a changing membership, we need to meet their needs. We will continue Lisa's efforts to be time-efficient in our board meetings and to offer one day meetings, making them more appealing to our members.

One of the most important tasks of our membership this year was stimulated by the words of Dr. James S. Todd, Executive Vice-President of the AMA, who spoke at the AMA Alliance Leadership Confluence II in Chicago in February. He asked that the Alliance help the AMA to do a most important task: to restore collegiality in the medical profession.

Dr. Todd saw . . . "loss of collegiality as a very dangerous trend." He went on to define loss of collegiality as, "a sense of competition, instead of cooperation; a sense of fighting over turf instead of teamwork; and letting small resentments grow larger and larger over the days." The spouses of physicians have seen these changing trends occur in medicine.

I see, "restoring collegiality" as a goal for the KMS Alliance membership to make those threads of concern and challenges in medicine bind us together, instead of pull us apart. Alliance members need to remind their spouses that all physicians continue to provide the best care possible. We need to remind ourselves that our spouse and other physicians are frustrated not so much with each other, but with the management of patient care.

So how can the Alliance meet this goal to restore "a sense of cooperation instead of a sense of competition, a sense of

teamwork instead of a sense of fighting over turf, and not letting small resentments grow larger and larger over the days?" One suggestion is that the Alliance continues to share programs and meetings with members of the medical society so spouses will be informed. We must continue to reach out to new physicians and their families in our communities and have social functions and fundraisers that bring the medical community together to share common interests and goals.

In conclusion, through AMA-ERF, we are bound by the common thread of sharing the responsibility of educating the next generation of physicians. Through SAVE, we can share the responsibility of preventing violence because violence has affected each one of us through either our spouse's practice or through our concern for our childrens' safety in the future. Through our patient advocacy efforts in the legislature, we can share the responsibility of insuring positive health care reform for patients and for physicians. When all these tasks seem daunting, we must remind ourselves of this quotation, "Not one person can do everything, but everyone can do something."

I firmly believe the Alliance has a strong place in today's world—perhaps stronger than it has had before. As we near the 21st century, the county, state, and national Alliances will need to be more tightly stitched together with their medical societies to form a common bond and to insure that the medical profession will be able to meet the future needs of patients.

As we begin a new year, I seek your help, your cooperation, and your support, and I thank you for the privilege of serving as President of the Kansas Medical Society Alliance. Paul and I look forward to working with Dr. Ross and his wife, Rhonda, to "dedicate ourselves to the health of Kansas." **KMS**

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Official proceedings of the 1996 House of Delegates



At 8 am on Saturday, May 4, 1996, the Kansas Medical Society and the Kansas Medical Society Alliance met for a joint opening ceremony for their respective annual meetings at the Ramada Inn, Hutchinson, Kansas. Speaker of the KMS House, Dee Bell, MD, thanked each of the delegates for their presence and participation then announced the order of business for the House.

KMSA President, Lisa Barker, introduced a special guest, the President of the AMA Alliance, Sharon Scott, Roseberg, Oregon. Mrs. Scott brought greetings from the AMA Alliance to the KMS Alliance and the delegates to the KMS House of Delegates. She outlined a variety of projects which show the AMAA's dedication to improving the community. Mrs. Scott shared of the success of the AMA Education and Research Foundation and praised Kansas' contribution of over \$30,000 during the past year. She spoke, too, of the increased legislative involvement of the Alliance, and encouraged members to continue their efforts to affect change at the grassroots level. Mrs. Scott also spoke of the Alliance's ongoing SAVE (Stop America's Violence

Everywhere) program. The Alliance is working to end violence against children, spouses, and the elderly. "On every level, Alliance members are working to break the silence which surrounds the problems of violence," Mrs. Scott said. On behalf of the more than 60,000 members, Mrs. Scott then asked physicians to encourage their spouses to join the AMA Alliance. "The AMA represents physicians committed to caring for patients, and the AMA Alliance represents physician spouses committed to caring for the community," she stated. In closing, Mrs. Scott thanked Kansas physicians for their involvement in and support of Alliance activities.

Mrs. Barker addressed the assembly, noting that, "timing really is everything." She shared that six years before, she had been installed as the President of the KMS Alliance, and was forced to resign due to the illness of her daughter. This year, however, the timing was good, and the experience of her daughter's illness had made her a better president. Mrs. Barker reported of the Alliance's success to register 200 individuals on the National Marrow Donor Registry. She

announced that representatives of the program would be on hand during the weekend to draw blood, and to add names to the registry. Mrs. Barker noted that the timing was also right for the SAVE program; she thanked Sharon Scott for her vision and participation in that program. Kansas' contributions to AMA-ERF increased 5.3 percent in the past year, bringing the total raised to \$43,975.29. The AMA-ERF checks were presented to the medical school deans at the Alliance Fall Board meeting. KMS Alliance membership remained steady during the past year, and Mrs. Barker noted that with KMS' "continued cooperation, we will continue to thrive." On behalf of herself and the entire Alliance, Mrs. Barker thanked and recognized KMS President, Linda Warren, MD, for her dedication to the activities of the Alliance.

Dee Bell, MD, introduced AMA Trustee, Percy Wooton, MD, of Virginia. Dr. Wooton brought greetings from the AMA Board of Trustees. The AMA is the largest medical organization in the world, and Dr. Wooton encouraged all physicians to become members of the AMA. "Physician unity," he stated, "will be the key to medicine's success in the future." Dr. Wooton reported on the progress of the Study of the Federation, an AMA effort to redesign itself in order to better meet the future needs of both physicians and patients. The "vision" of the consortium's report was praised by Dr. Wooton, and he encouraged all physicians to be supportive of the study's main goal, that of increasing the AMA's inclusiveness. Dr. Wooton shared that there had been more medical legislation in this Congress than ever before, and that the AMA had a, "90 percent batting average" in legislative activities. Finally,

as a member of the Alliance himself, Dr. Wooton congratulated the KMS Alliance for its efforts. "Out in the community, you are the best PR physicians have," he said. "You truly represent the eyes and ears of the medical profession."

The Speaker invited Dr. Linda Warren to give the President's report. Dr. Warren expressed her pleasure at the opportunity to address the House and share with the delegates the activities of the past year. She also expressed her regrets at the absence of Drs. Jimmie Browning and Craig Concannon, both KMS officers who were unable to attend the annual meeting. "This year is difficult to summarize," Dr. Warren noted, "because it is no longer a plan, but action; the hopes are now reality." The successes though, Dr. Warren noted, could not have been attained without the dedication of the KMS staff, and she thanked them for their hard work.

Each of this year's activities was based on the philosophy that communication is essential. Dr. Warren outlined a variety of accomplishments which occurred over the past year. The Task Force on Practice Issues, created by the House of Delegates in 1995, met to discuss a variety of issues. Dr. Warren thanked Dr. Jimmie Browning for his leadership as the Chairman of the task force. This year also saw the first ever Interspecialty Forum. Every specialty which holds a seat in the KMS House of Delegates was invited to send a representative to the forum. The physicians joined to discuss common issues and concerns as well as some, "specialty specific" issues. Ongoing annual meetings have been planned. Dr. Warren shared her pride in the reactivation of the KU/KMS Liaison Committee which she hopes will build a

bridge between KMS and academic physicians. She thanked Don Hagen, MD, the Executive Vice Chancellor of the University of Kansas School of Medicine, for his support of and participation in the committee. KMS has made a commitment to communication through the written word, and to that end debuted KANSAS PHYSICIAN during the past year. The newsletter has brought to physicians a variety of information and viewpoints regarding the many issues facing medicine today. Along with *Kansas Medicine*, both publications will continue to serve KMS members into the future.

KMS membership is at an all time high, Dr. Warren reported. Nearly 87 percent of Kansas' practicing physicians, and over 90 percent of the medical school students are members of the medical society. In the course of the year, Dr. Warren shared that she had traveled to each of the 19 council districts. At various times, she had been accompanied by Lisa Barker who was a terrific ambassador for Kansas medicine. "Meeting with you in your communities," she shared with the delegates, "was truly a reminder that all health care is local."

Dr. Warren observed that Heartland Health, the newest member of the KMS family of companies, was developing a strong reputation around the state. She reported that KaMMCO had again posted another year of success.

Concluding, Dr. Warren noted that she had saved the "best for last"—the creation of the Western Kansas office, co-sponsored by the family of companies. The office opened specifically as an outreach to western Kansas physicians, and was well-received by physicians statewide. "We

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Continued from page 47

will ask one question when we visit the communities of western Kansas," Dr. Warren stated. "We will ask what we can do for you, and then, we will listen to the answer." She shared her hope in the possibility of more satellite offices in the future.

Dr. Warren noted that KMS leadership was being transferred to David Ross, MD, and she was looking forward to the opportunity of working with him.

Finally, Dr. Warren praised her physician spouse, Roger Warren, MD, for his support throughout the year. She expressed gratitude to the membership for the privilege and honor of serving as their president. "This," she said, "has

been the best year of my life. Thank you very much."

Lisa Barker presented Dr. Hagen with AMA-ERF checks for the University of Kansas School of Medicine, Kansas City campus.

The Speaker then declared the Joint Opening Ceremony closed, and announced that the first House of Delegates would convene in 15 minutes.

FIRST SESSION

Speaker of the House Dee Bell, MD, called the first session of the 137th KMS House of Delegates to order at 9:30 am and introduced the Vice Speaker, Robert Barnett, MD. Dr. Bell explained the

composition of the House of Delegates, outlined the rules and procedures to be followed, and noted that Davis' Rules of Order would be followed during the meeting. Only delegates would be recognized to vote. All others should convey their opinions to their delegates. Dr. Bell announced that the Reference Committee would meet immediately following the first session. The presence of a quorum was announced, and the minutes of the 1995 House of Delegates, published in the Summer, 1995 issue of *Kansas Medicine* were approved.

Dr. Warren outlined the procedure to be followed for the primary election, if it were necessary to conduct one. She read the slate:

President-elect

Joseph Philipp, MD, *Manhattan*

First Vice-President

Jimmie Browning, MD, *Clay Center*

Second Vice-President

Anne (Katie) Rhoads, MD, *Olathe*

Constitutional Secretary

Robert Durst, MD, *Topeka*

Howard Wilcox, MD, *Hays*

Treasurer

Daniel Suiter, MD, *Pratt*

AMA Delegate

Stephen Miller, MD, *Parsons*

AMA Delegate

Terry Poling, MD, *Wichita*

AMA Alternate Delegate

Roger Warren, MD, *Hanover*

AMA Alternate Delegate

Craig Concannon, MD, *Beloit*

Speaker of the House

Dee Bell, MD, *Shawnee Mission*

Vice Speaker of the House

Robert Barnett, MD, *Topeka*

There were no nominations from the

Kansas Medical Society Membership

	4-29-96	1995*	1994*	1993*
Active	2533	2524	2347	2248
Active Second Year	78	80	87	77
Active First Year	66	56	40	35
Probationary	74	78	60	57
Resident	266	271	282	279
Student	523	528	344	223
Associate	64	60	49	44
Personal Exempt	31	31	11	8
Retired	523	524	510	507
Military Service	0	0	0	1
Military Exempt	0	0	0	1
Emeritus	52	52	52	55
Honorary	2	2	2	2
Semi-retired	7	7	3	2
Osteopathic Associate	70	62	17	0
Totals	4298	4275	3804	3539

* Year end totals

floor. Since there were no more than two candidates for any one office, it was not necessary to hold a primary election. The election would be held during the second session.

Dr. Barnett called for committee reports, announcing that some were submitted as written reports, and placed in the delegates' notebooks.

Treasurer

This report is included in the delegates' notebooks.

Constitutional Secretary

This report may be found in the figure on page 48.

Necrology

Warren Meyer, MD

Dr. Meyer requested a moment of silent remembrance following the reading of the names. This report may be found in the figure on page 50.

Editorial Board

Warren Meyer, MD

Last year at this time we announced that *Kansas Medicine* would be published on a quarterly basis beginning January 1, 1995. Our schedule for publication became quite erratic thereafter for a variety of reasons, and we look forward to more predictable publication dates. We have appreciated the number of you who called KMS with inquiries about your copy of *Kansas Medicine*.

Again, we would like to thank those of you who submitted articles for publication. Despite the experience of other state medical journals that have expired because of lack of articles, we have never lacked excellent articles. We ask that you continue your efforts.

This year we had issues featuring special events such as the Genome Seminar in Wichita, and the 20th anniversary of the University of Kansas School of Medicine-Wichita Campus. Excerpts from the, "Horse and Buggy Doctor," by Dr. Hertzler have revealed a kinship between that pioneer practitioner and his modern-day counterpart. We hope that the articles have been of value to you. Book reviews, especially by Kansas authors, have reappeared and we plan to continue them. The Editorial Board would like to thank President Warren for preparing the President's Message for *Kansas Medicine*, as well as her monthly messages for the KANSAS PHYSICIAN. Knowing how much physicians dislike writing, we are most appreciative of her efforts to recognize the importance of the

Journal.

Perhaps the best way to describe our financial condition is that Dr. Kervorkian stands in the wings, looking at us in an increasingly knowing and anticipatory manner. Because of the small circulation and the reduced number of issues, it is increasingly difficult to secure advertising monies from the major pharmaceutical companies. We have also reduced our advertising revenues from professional liability companies to a single advertiser (and I feel no need to reveal its identity.) It is our plan to continue to seek both national and local advertisers. The Editorial Board would like to thank the membership for your moral and most importantly, your financial support.

In February, we received a letter from the Australian Rural Health

Research Institute requesting permission to use articles and abstracts from *Kansas Medicine* in a CD-ROM to be distributed to rural practitioners in Australia. We were pleased to comply with the request.

It is important to recognize Susan Ward and Pam Manning who have served on a part-time basis to insure that *Kansas Medicine* remain a fine Journal. We also recognize Nancy Sullivan, who has coordinated all the activities associated with the publication during the transition. Plans call for Susan Ward to continue editing the Journal from Estes Park, Colorado. We look forward to working with Allison Peterson and Linda Austin as the Journal comes in-house.

KaMMCO

Jimmie Gleason, MD

Seven years ago, on June 28, 1989, KaMMCO was formed and it has been growing ever since. Last year KaMMCO took some "hits" for the first time in her history. Approximately 40 percent of Kansas physicians are insured with KaMMCO, but the company recently experienced the loss of about two percent of its insureds due to the non-renewal of two large groups. KaMMCO's unique philosophy—that of

Again, we would like to thank those of you who submitted articles for publication.

We have never lacked excellent articles.

Warren Meyer, MD
Editorial Board Report
1996 Annual Meeting

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physician advocates who just happen to sell insurance—has brought many other PIAA companies to Kansas for advice. They are impressed with KaMMCO's hard line on policies, as well as the, "family of companies" package of which KaMMCO is a part. KaMMCO has a court record of 46-2. This year saw the beginning of an ongoing program, the Physician Support Program for those physicians who have experienced or are experiencing a suit. Dr. Gleason praised the combined lobbying efforts of KMS and KaMMCO as a true voice in the legislature for Kansas physicians. Dr. Gleason also announced the creation of MedLaw, an in-house legal firm for physicians. The attorneys currently on staff of both KaMMCO and KMS will provide legal services in those areas where the, "medical and legal arenas collide." The Loss Prevention programs for the coming months were announced, and Dr. Gleason thanked the delegates for the opportunity to speak. In closing, he assured the House that KaMMCO would, "never forget where we came from."

Heartland Health

Bruce Gosser

"We have covered lives!" Mr. Gosser announced; currently, Heartland Health has 3500 members. From very "humble beginnings," Heartland is expanding its participation into a variety of programs including Medicaid, the League of Kansas Municipalities, the Kansas Employers Coalition on Health, and Heartland's own Physician Office Product. Of the Physician Office program, Mr. Gosser acknowledged, "growing pains" with the first "roll out" of the program and assured delegates that when the program debuts (again) in the coming months, each of the original problems will have been addressed. Contracting with hospitals across the state continues to progress and there are now 64 members of Heartland's hospital network. The network represents 50 percent of the hospitals in the state and 60-65 percent of the hospital beds. Since January, Mr. Gosser noted, there has been a 65 percent

increase in the number of hospitals in the Heartland network. Mr. Gosser recognized the members of the Heartland staff who were present, and thanked the delegates for the opportunity to represent Kansas physicians.

Necrology Report

<i>Name</i>	<i>City</i>	<i>Age</i>	<i>Date</i>
Clyde W. Alexander, MD	Kansas City	90	10-23-86
D. R. Bedford, MD	Topeka	86	8-4-95
Thomas P. Butcher, MD	Emporia	91	4-16-96
Lloyd H. Coale, MD	Shawnee Mission	82	3-22-95
Leslie F. Eaton, MD	Salina	89	7-16-95
Hubert M. Floersch, MD	Lawrence	86	7-1-95
Clell Flowers, MD	Wichita		
John K. Fulton, MD	Wichita	77	8-1-95
Lyle G. Glenn, MD	Protection	83	12-4-95
David C. Hacker, MD	Shawnee Mission	45	9-7-95
Doris Kubin, MD	McPherson	79	5-28-95
David Lasley, MD	Boulder, CO	72	7-15-95
Albert N. Lemoine, Jr., MD	Shawnee Mission	76	11-24-94
Paul Lovett, MD	Wichita		
Ward A. McClanahan, MD	Wichita	73	12-3-95
Franklin R. Miller, MD	Winfield	92	8-22-95
Gerald B. Pees, MD	Lawrence	80	1-30-96
Jesse D. Rising, MD	Kansas City, MO	82	2-15-96
Shelby Rose, MD	Wichita	55	12-18-95
Edward H. Saylor, MD	Topeka	56	8-29-95
Dale Smith, MD	Overland Park	75	10-17-95
Karl W. Stock, MD	Topeka	82	5-13-95
Maj. Martin Swan, MD	Auburn, CA	89	11-3-95
Karl K. Targownik, MD	Topeka	80	1-2-96
Theodore E. Wade, MD	Monte Morelos, MX	92	1-16-96
Theodore Young, MD	Topeka	73	2-1-96

University of Kansas

Don Hagen, MD

Dr. Linda Warren introduced Dr. Hagen and invited him to address the House. Dr. Hagen expressed his honor at the opportunity to speak to the delegates. "This is a challenging time in medicine and education," he said. KU wants to "listen, listen, listen" to the physicians of Kansas. According to Dr. Hagen, "What you need is what we need to hear." He recognized the tremendous opportunities which exist for physicians and KU to work together. "We need your help, and we need to work together," he said. Dr. Hagen shared his strong belief in family practice and a balance of specialty involvement, and encouraged each delegate to honor the, "sacred trust" of medicine by being active with medical students. In closing, Dr. Hagen expressed his personal thanks to Dr. Warren for her dedication to the KU/KMS relationship.

Executive Director

Jerry Slaughter

Mr. Slaughter expressed his thanks to the Alliance for their involvement with KMS, to Dr. Hagen who is a, "breath of fresh air to us at KMS," and to Dr. Wooton for his presence. This weekend, Mr. Slaughter noted, is a time of mixed emotions—excitement at the installation of a new president, but also a bit of sadness as the past president leaves office. "We began our careers in organized medicine together," Mr. Slaughter said of Dr. Warren, the outgoing president and the first female president of KMS. "She is a tremendous

ambassador for Kansas medicine."

He also shared his excitement at the installation of Dr. Ross, the next KMS president.

"Dr. Ross brings a wonderful sense of humor and the perspective of a primary care physician to his position. We all look forward to working with him." Mr. Slaughter recognized the staff of the family of companies and introduced the new additions to the KMS staff since the last annual meeting: Meg Henson, Director of Government Affairs; Mary Sprenkel, Western Kansas Field Representative; Linda Austin, Communications Associate; and Denise Lantz, Finance Secretary. Mr. Slaughter also recognized Nancy Sullivan and Gary Caruthers as key members of the KMS staff.

This has been a good year for Kansas medicine, Mr. Slaughter said. The family of companies—KMS, KaMMCO, Heartland Health, and MSC—have all worked hard to be advocates for physicians. He offered congratulations to the KMS officers for being on the cutting edge of forward thinking. Politically, Mr. Slaughter noted, this is a crucial year for Kansas medicine. We will be electing one senator and four representatives to Congress, as well as 45 senators and 125 representatives to the Kansas legislature. "You must join KaMPAC," Mr. Slaughter urged. "Our opponents are

The greatest challenge physicians face today is that of unity.

While diversity is your greatest strength, it also represents your greatest weakness.

Jerry Slaughter
Executive Director's Report
1996 Annual Meeting

raising money to support their candidates. Do me a favor and do yourself a favor, join KaMPAC today."

Mr. Slaughter shared with the delegates the necessity of sticking together. "The greatest challenge physicians face today is that of unity. While diversity is your greatest strength," he said, "it also represents your greatest weakness. Beyond the differences in geography, specialty, and demographics, you are all physicians first, dedicated to taking care of patients like no one else can."

On March 5, 1973, Mr. Slaughter came to KMS and this represents the beginning of his 24th year. He expressed his loyalty to the organization and the great, "respect for what you do every day, one patient at a time."

OFFICIAL PROCEEDINGS OF THE 1996 HOUSE OF DELEGATES

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The Speaker called for unfinished business. There was none.

The Speaker called for new business. Larry Anderson, MD, introduced Resolution 96-28 and it was referred to the Reference Committee.

The rules for the Council District elections were read. Districts needing to conduct elections were 3, 5, 8, 9, 12, and 16.

An invitation was extended to all delegates to attend the Reference Committee meeting immediately following the First House of Delegates. Members of the Reference Committee are: Rick Kellerman, MD, Chairman; Frank Depenbusch, MD, Terry Klein, MD, John Pokorny, MD, and Mary Redmon, DO.

Following several announcements, the meeting was adjourned at 10:29 am.

SECOND SESSION

The Second Session of the KMS House of Delegates was called to order by Speaker Dee Bell, MD, at 8:44 am on Sunday, May 5, 1996. Rules by which the meeting would be conducted were reviewed, and the presence of a quorum was announced. Election ballots were distributed, and the Speaker named the Tellers: Warren Meyer, MD, Wichita, and Arthur Snow, MD, Shawnee Mission. While the ballots were being distributed, the Speaker again encouraged the delegates to join KaMPAC.

The Speaker asked Reference Committee Chairman, Rick Kellerman, MD, Salina, to present the committee's report. Dr. Kellerman read the committee's recommendations for each resolution, and Dr. Bell invited discussion and voting by the delegates. (Results of these actions are printed on page 53.) Dr. Bell thanked the Reference Committee for its work.

The election results were announced:

President-elect

Joseph Philipp, MD, *Manhattan*

First Vice-President

Jimmie Browning, MD, *Clay Center*

Second Vice-President

Anne (Katie) Rhoads, MD, *Olathe*

Constitutional Secretary

Howard Wilcox, MD, *Hays*

Treasurer

Daniel Suiter, MD, *Pratt*

AMA Delegate

Stephen Miller, MD, *Parsons*

AMA Delegate

Terry Poling, MD, *Wichita*

AMA Alternate Delegate

Roger Warren, MD, *Hanover*

AMA Alternate Delegate

Craig Concannon, MD, *Beloit*

Speaker of the House

Dee Bell, MD, *Shawnee Mission*

Vice Speaker of the House

Robert Barnett, MD, *Topeka*

The Speaker called for unfinished business. There was none.

The Speaker called for new business. Larry Anderson, MD, Wellington, presented to the House a motion regarding the case of Stanley Naramore, DO. The text of the motion, which was approved, follows:

The 137th meeting of the KMS House of Delegates affirms the action of the Executive Committee to prepare an amicus curiae brief in the matter involving Stanley Naramore, DO; and directs the KMS leadership to immediately contact the Kansas State Board of Healing Arts to discuss the full implications of the action against Dr. Naramore.

Dr. Bell introduced the Society's new President, David Ross, MD, who thanked the delegates for the opportunity to serve as their president. He spoke of the changes he has seen in medicine and of his areas of interest for the coming year. (The full text of his speech may be found on page 40.)

Dr. Ross announced the newly elected Councilors:

District 3

Larry Riffel, MD, *Overland Park*

District 5

James Gardner, MD, *Manhattan*

District 8

Rick Schoeling, MD, *Arkansas City*

District 9

Pending

District 12

Pending

District 16

Michael Machen, MD, *Quinter*

Dr. Ross installed the re-elected Speaker, Dee Bell, MD, and the re-elected Vice Speaker Robert Barnett, MD.

Dr. Ross then announced that the next meeting of the House of Delegates will be held May 1-4, 1997, at the Marriott Hotel, in Wichita, Kansas. Following several other announcements, the meeting was adjourned. ~~RS~~

Resolutions from the 1996 House of Delegates

RESOLUTION 96-1

Physician Responsibility and Cost Containment

Whereas, Cost containment issues dominate the considerations of equity and excellence in national health policy; and

Whereas, An individual hospital's survival depends on its capability to respond to prospective payment incentives by transmitting these incentives to the medical staff; therefore be it

Resolved, That as new reimbursement and health care financing plans evolve, physicians should be reminded that their first responsibility is that of patient advocate and while conscious of costs, the delivery of quality medical care is the physician's foremost consideration.

RESOLUTION 96-2

Smoking & Tobacco Product Sales

Whereas, Numerous studies have found that tobacco smoke is a major contributor to indoor air pollution; and

Whereas, Reliable studies have shown that breathing secondhand smoke is a significant health hazard for certain population groups, including elderly people, individuals with cardiovascular disease, and individuals with impaired respiratory function, including asthmatics and those with obstructive airway disease; and

Whereas, Health hazards induced by breathing secondhand smoke include lung cancer, respiratory infection, decreased exercise tolerance, decreased respiratory function, bronchoconstriction, and bronchospasm; and

Whereas, Nonsmokers who suffer allergies, respiratory diseases and other ill effects of breathing secondhand smoke may experience a loss of job productivity or



may be forced to take periodic sick leave because of such adverse reactions; and

Whereas, Smoking is a documented cause of fires, and cigarette and cigar burns and ash stains on merchandise and fixtures cause economic losses to businesses; therefore be it

Resolved, That the Kansas Medical Society supports a prohibition on smoking in public places and in places of employment, including hospitals; and be it further

Resolved, That the KMS support strict enforcement of laws prohibiting the sale of tobacco products to minors; and be it further

Resolved, That the KMS encourage physicians to take a leadership role in educating their patients and their communities about the hazards of secondhand smoke.

RESOLUTION 96-3

Physician-Patient Privilege

Whereas, Communication between physician and patient, including test results, clinical findings or any other patient information gathered in person or through any medium, are considered confidential and subject to the physician-patient privilege statute (K.S.A. 60-427); and

Whereas, In most circumstances a patient or his or her authorized representative or guardian must consent in writing prior to the release of privileged information; therefore be it

Resolved, That the Kansas Medical Society periodically inform its members of their legal responsibilities relating to the confidentiality and release of privileged patient information.

RESOLUTION 96-4

KMS-KFMC Relationship

Whereas, Endorsement by the Kansas Medical Society is essential for the continued contractual arrangement between KFMC and HCFA to serve as the Peer Review Organization for Kansas; and

Whereas, The Kansas Medical Society in Resolution 90-8 reaffirmed and mandated yearly review of its endorsement (as it has yearly for a number of years); and

Whereas, The Kansas Medical Society through its various committees and subcommittees has interacted with KFMC in a positive and constructive manner; and

Whereas, KFMC has publicly stated that precertification review is the practice of medicine; therefore be it

Resolved, That the Kansas Medical Society reaffirm its endorsement of the concept of peer review and the policy statement of the Kansas Medical Society and the AMA that "peer review is the practice of medicine"; and be it further

Resolved, That KMS endorses KFMC as the PRO for Kansas; and be it further

Resolved, That KMS endorse or not endorse KFMC annually.

RESOLUTION 96-5

Health Care Stabilization Fund

Whereas, The Health Care Stabilization Fund was created by the 1976 Legislature to address a lack of available liability insurance for Kansas physicians; and

Whereas, The Legislature imposed mandatory liability insurance as a condition of physician licensure in

order to assure capitalization of the Fund; and

Whereas, The Fund has served its purpose well; therefore be it

Resolved, That the KMS Executive Committee is directed to continue to monitor the status of the Health Care Stabilization Fund closely, including studies and recommendations of the Oversight Committee; and be it further

Resolved, That the Executive Committee shall report annually to the House of Delegates on the status of the Health Care Stabilization Fund.

RESOLUTION 96-6

Amendment to KMS Bylaws-Council and Executive Committee Composition

Resolved, That section 8.11 of the bylaws be amended by deleting the word "and" between "District" and "the" and by adding the following after "KaMMCO"—"the Chairman of the Board of Heartland Physicians Health Network and the Executive Vice Chancellor of the University of Kansas School of Medicine or designee;" and be it further

Resolved, That section 8.12 be amended by deleting "the University of Kansas School of Medicine, the Kansas State Board of Health" and by inserting "the Director of Health, Kansas Department of Health and Environment;" and be it further

Resolved, That Section 8.15 be amended by adding the following after "KaMMCO"—"and the Chairman of the Board of Heartland Physicians Health Network."

8.0 The Council

8.1 Composition

8.11 Members of the Council are the President, President

RESOLUTIONS FROM 1996 HOUSE OF DELEGATES

Continued from page 55

Elect, Immediate Past President, First Vice President, the Second Vice President, Secretary, Treasurer, and Speaker and Vice Speaker of the House, Delegates and Alternate Delegates to the American Medical Association, a Councilor from each Council District, the Chairman of the Board of KaMMCO, the Chairman of the Board of Heartland Physicians Health Network and the Executive Vice Chancellor of the University of Kansas School of Medicine or designee. Each councilor and an alternate are to be elected by members of the component societies of the district prior to the convening of the House of Delegates; excepted, that the councilor or his alternate may be elected by a caucus of the delegates if the members have not done so by the date the House of Delegates convenes. The elected alternate replaces an active member in his absence.

8.12 Associate membership of the Council includes alternate councilors and one (1) representative each from the Director of Health, Kansas Department of Health and Environment, the Kansas State Board of Healing Arts, one (1) representative each from recognized specialty organizations and the President of the KMS Alliance. Associate members may attend plenary sessions of the Council but shall not be entitled to vote.

8.15 The Executive Committee of the Council shall be composed of the President, the President Elect, the Immediate Past President, the First Vice President, the Second Vice President, the Secretary, the Treasurer, the Delegates and Alternate Delegates to the AMA, the Speaker and Vice Speaker of the House of Delegates, and the Chairman of the Board of KaMMCO and the Chairman of the Board of Heartland Physicians Health Network. The Chairman of KMS Services, Inc., the President of the KMS Alliance, the President of the Kansas Foundation for Medical Care and the Chairman of the KMS Hospital Medical Staff Section shall be ex officio, non-voting members. The committee shall meet regularly and at least six (6) times during each year at the call of the President, and shall have authority to act in the interim between meetings of the Council upon all matters which would ordinarily require approval by the Council, which do not properly necessitate a special meeting of the Council and which have not been delegated elsewhere by the Bylaws.

8.16 Only physicians who are members of the

Kansas Medical Society may serve as voting members of the Council and Executive Committee. All other members of the Council and Executive Committee shall serve in a non-voting capacity.

RESOLUTION 96-7

Formation of the Cimarron Medical Society

Whereas, The Seward County Medical Society expressed an interest in becoming a multi-county component medical society by incorporating Morton and Stevens counties within its organization; and

Whereas, The physicians of Morton and Stevens counties have expressed an interest in affiliating with the physicians of Seward County; and

Whereas, The Seward County Medical Society voted to change its name to The Cimarron Medical Society; and

Whereas, The Council approved this action; therefore be it

Resolved, That the Seward County Medical Society be renamed the Cimarron Medical Society; and be it further

Resolved, That the bylaws be amended as follows:

8.417—Delete the counties of Morton and Stevens.

8.415—Add the counties of Morton and Stevens.

RESOLUTION 96-8

Kansas Medical Directors Association

Whereas, The Kansas Medical Directors Association (KMDA) was formally organized in January 1995 to provide a forum for physicians committed to quality in long term care; and

Whereas, The KMDA membership consists of over 30 physicians, bylaws have been adopted, and officers elected; and

Whereas, The KMDA desires a more formal relationship with the Kansas Medical Society to promote more awareness and understanding of long term care issues; and

Whereas, The American Medical Directors Association is presently a recognized section of the American Medical Association; therefore be it

Resolved, That the KMDA be recognized as an official section of the KMS House of Delegates; and be it further

Resolved, That the KMS bylaws be amended by changing Section 4.5817 from “deleted” to “Kansas Medical Directors Association.”

RESOLUTION 96-10

Health Plan Gag Clauses

Whereas, Gag clauses and policies aimed at chilling physician-patient communication are being used increasingly by HMOs and health plans nationwide; and

Whereas, Gag clauses frequently have been construed to prevent physicians from discussing treatment options the plan does not cover, from referring patients for second opinions, and from referring patients to specialists, programs, or centers of excellence outside the plan; therefore be it

Resolved, That the Kansas Medical Society support the American Medical Association in its campaign to educate the public about gag clauses and in its efforts to call on health plans to eliminate the gag clause from their contracts; and be it further

Resolved, That the Kansas Medical Society work with the Kansas Insurance Commissioner and the legislature, if necessary, to address the problem on the state level.

RESOLUTION 96-11

Affiliate and Associate Membership

Whereas, KaMMCO and Heartland Health require membership in the Kansas Medical Society of those physicians who are insured by or contract with those organizations; and

Whereas, Both organizations strongly support maintaining the membership requirement as a means of preserving the important linkage between the KMS family of companies; and

Whereas, Current KMS Bylaws require that physicians from other states seeking associate member status to participate in KaMMCO or Heartland Health must join through a component or county society and pay one-half dues; and

Whereas, It is essential that both KaMMCO and Heartland Health be able to do business with physicians in other states on a competitive basis; and

Whereas, An affiliate member category was created for institutions, facilities, corporations and other organizations that do not qualify for other categories of membership to facilitate the offering of professional liability insurance by KaMMCO; therefore be it

Resolved, That sections 1.62, 1.623 and 1.64 of the KMS Bylaws be amended as follows:

1.62 Members with full privileges except for the right to vote and hold office. They apply for membership through a component society but are assessed less than the full amount of dues.

1.623 Associate Members: Physicians whose principal practice is in another state and wish to affiliate with the Kansas Medical Society. They shall pay dues and assessments as set by the Council; and be it further

Resolved, That section 1.64 of the KMS bylaws be amended by inserting “Individuals” before “Institutions” so that the new section will read as follows:

1.64 Affiliate Members — Individuals, institutions, facilities, corporations or other organizations that do not qualify for other categories of membership. Affiliate members may not vote nor hold office. They may apply directly for membership, and are not required to join through a component society. Dues and assessments for Affiliate Members shall be set by the Council; and be it further

Resolved, That the KMS Council present to the House of Delegates annually a listing of all Affiliate members accepted during the previous year under Section 1.64.

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RESOLUTION 96-12

Guidelines for Supervision and Delegation to Non-Physician Personnel

Whereas, The health care system is experiencing a proliferation of mid-level practitioners and others who work in supervised, directed, referral or collaborative relationships with physicians; and

Whereas, The roles and responsibilities of these personnel vary widely, depending on their training, experience, and the quality of the direction, supervision and delegation by physicians with whom they work; and

Whereas, To assure quality, physicians have a responsibility to be actively involved in and knowledgeable about the care provided by personnel who work under their supervision, direction or referral; therefore be it

Resolved, That physicians have an ethical duty to adhere to the following guidelines in their professional relationships with non-physician personnel whom they supervise, direct, or delegate acts which constitute the practice of medicine and surgery:

Guidelines for Direction, Supervision and Delegation to Non-Physician Personnel

- I. Every physician who directs, supervises or delegates acts which constitute the practice of medicine and surgery to non-physician personnel should:
 - (a) be actively engaged in the practice of medicine and surgery in Kansas;
 - (b) establish a process for the initial and periodic evaluation of the professional competency of such personnel;
 - (c) annually review any written practice protocols between the physician and such personnel;
 - (d) direct, supervise or delegate to such personnel only those acts which constitute the practice of medicine and surgery which the physician believes such personnel is competent to perform, based on not less than 30 days practice under the immediate direction

and supervision and in the physical presence of the physician;

- (e) direct, supervise or delegate only those acts which are within the normal and customary specialty, competence and practice of the physician;
 - (f) review all patient records of patients treated by such personnel and document such review in the patient record;
 - (g) provide for a substitute physician to direct and supervise such personnel when the physician is temporarily absent or unavailable by telecommunication;
 - (h) periodically see patients at the same location with such personnel at a minimum of 24 days each year;
 - (i) provide that non-physician personnel should be identified as such to patients;
- II. No physician should direct, supervise or delegate acts which constitute the practice of medicine and surgery to more than two non-physician personnel simultaneously;
 - III. If arrangements to direct, supervise, enter into practice protocols, or delegate acts which constitute the practice of medicine and surgery to non-physician personnel are inconsistent with these guidelines and designed primarily to satisfy or circumvent existing legal requirements, a physician should not receive any fees or other compensation;
 - IV. Notwithstanding these guidelines, physicians should adhere to any applicable laws governing the professional relationships between physicians and non-physician personnel, and be it further

Resolved, That the Executive Committee be asked to continue the Task Force on Practice Issues for another year in order to further discuss and refine the concepts contained in this resolution, and be it further

Resolved, That the concept of a quality assurance program for the use of non-physician personnel be referred to the Task Force on Practice Issues for study and recommendation.

RESOLUTION 96-13*Commendation for
Lew Purinton, M.D.*

Whereas, Lew Purinton, M.D., has, for more than 40 years, devoted his energies to the practice of medicine in Kansas; and

Whereas, His faithful presence and leadership in the Kansas Medical Society Executive Committee and Council has benefitted both the profession and the public; and

Whereas, He has served Kansas medicine with distinction on the national level as Alternate Delegate and Delegate to the American Medical Association for more than 20 years; and

Whereas, This series of accomplishments have brought great credit to the Kansas Medical Society and to the medical profession; therefore be it

Resolved, That the Kansas Medical Society present to Lew Purinton, M.D., this resolution of commendation for his years of devoted service to the profession.

RESOLUTION 96-14*American Cancer Society
Mobile Classroom and
Health Education Initiative*

Whereas, The American Medical Association acknowledged that, "It is the growing belief that any future advances made in improving the nation's health will not result from spectacular biomedical breakthroughs. Rather, advances will result from personally initiated

actions that are directly influenced by the individual's health-related activities, beliefs, and knowledge. School health education can make a valuable contribution in areas such as these and can play an important role in improving the quality of living;" and

Whereas, The American Cancer Society has adopted the development and enactment of comprehensive school health education as one of its core goals for the year 2000; and

Whereas, The Kansas Division of the American Cancer Society has developed a mobile classroom to provide an action oriented learning experience to teach Kansas youth that good nutrition and healthy living habits are essential to a healthy body and strong mind; therefore be it

Resolved, That the Kansas Medical Society endorse the mobile classroom and encourage its members to work with the American Cancer Society to promote the mobile classroom and health education in their communities throughout Kansas.

RESOLUTION 96-15*Patient-Physician Covenant*

Whereas, Medicine is, at its center, a moral enterprise grounded in a covenant of trust. This covenant obliges physicians to be competent and to use their competence in the patient's best interests. Physicians, therefore, are both intellectually and morally obligated to act as

advocates for the sick, injured or infirm wherever their welfare is threatened and for their health at all times; and

Whereas, By its traditions and very nature, medicine is a special kind of human activity — one that cannot be pursued effectively without the virtues of humility, honesty, intellectual integrity, compassion, and effacement of excessive self-interest; therefore be it

Resolved, That the Kansas Medical Society adopt the following covenant between the physician and patient:

A physician's first obligation must be to serve the good of those persons who placing the patient's well-being first and foremost may compromise quality or jeopardize access to medical care.

The medical profession must reaffirm the primacy of its obligations to the patient through national, state and local professional societies, through research, and especially through personal behavior. As advocates for the promotion of health and support of the sick and injured, physicians are called upon to discuss, defend and deliver medical care by every ethical means available. Only by caring and advocating for the patient can the integrity of the profession be affirmed; and be it further

Resolved, That the Kansas Medical Society submit an appropriate resolution to the 1996 AMA annual meeting encouraging the American Medical Association to adopt this covenant of organized medicine's commitment first and foremost to

RESOLUTIONS FROM 1996 HOUSE OF DELEGATES

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patients.

RESOLUTION 96-16

Credentialing and Managed Care Companies

Resolved, That the Kansas Medical Society support the concept of a centralized credentials verification program which could provide services to managed care plans and hospitals statewide.

RESOLUTION 96-17

Military Service Members

Whereas, Continued involvement by U.S. military troops in overseas peacekeeping efforts affects those physician members with military obligations; and

Whereas, Those individuals in the reserve capacity are faced with an almost immediate temporary closure of an office practice; therefore be it

Resolved, That section 1.6123 of the KMS bylaws be amended by inserting the following language and deleting the original language so that the new section will read as follows:

1.6123 Military Service-Reserve — Any member reservist called into service in a full-time active duty capacity with the armed forces may be exempt from payment of all or part of membership dues at the discretion of the Executive Committee; and be it further

Resolved, The section 1.6128 of the KMS bylaws be amended by inserting the word “Active” after the word “Service” so that the section will read as follows:

1.6128 Military Service-Active — Physicians on full-time active duty with the military service. They shall pay fifty per cent (50 percent) of the regular KMS dues and assessments.

They shall have the right to vote, but will not be eligible to hold office.

RESOLUTION 96-18

Release of Child Immunization Records

Whereas, Immunizations play a major role in the health of children in this country; and

Whereas, Complete immunization records are required when children enter Kansas schools; and

Whereas, Producing complete records can create a severe burden to parents, schools, child and day care facilities, health departments and physicians’ offices when parental consent is required each time a record is released; and

Whereas, During the 1996 Kansas legislative session, consideration was given to a bill which would permit the release of child immunization information to certain facilities needing such information without the parent’s written authorization; and

Whereas, The passage of this type of legislation appropriately written would be in the best interests of the child, parents, schools, physicians and other entities needing this information; now therefore be it

Resolved, That the Kansas Medical Society go on record in support of the law enacted by the 1996 legislature allowing the release and sharing of childhood immunization information, and encourage the legislature to extend its provisions to private schools.

RESOLUTION 96-19

Infectious Disease Control Programs

Whereas, The Kansas legislature enacted HB 2586 which was designed to limit the exposure of persons working in law enforcement and emergency services to a specific life threatening infectious disease. This goal was to be accomplished through court ordered testing of persons arrested, charged or convicted of crimes and through the disclosure, reporting and sharing of related information; and

Whereas, While the intent of this legislation is meritorious, it failed to accomplish the development of a realistic

prevention program which would include other life threatening infectious diseases and extend the program provisions to all persons involved in the handling or caring for this identified group of persons; therefore be it

Resolved, That the Kansas Medical Society work with appropriate law enforcement, health and other involved organizations to develop a medically sound and realistic infectious disease prevention program; and be it further

Resolved, That the KMS Legislative Committee be directed to develop appropriate amendments for introduction in the next legislative session to accomplish these objectives.

RESOLUTION 96-20 *Workers Compensation Program*

Whereas, Current Kansas statute (K.S.A. 44-510e subparagraph a) provides that job task analysis (application of physician determined work restrictions) under the Kansas Workers Compensation Program is to be performed by a physician; and

Whereas, The medical profession concurs that evaluation, determination and assignment of work related restrictions must remain a physician responsibility; and

Whereas, Some physicians believe that the performance of job task analysis can be performed by non-physicians who possess the appropriate skills and training under the direction of a

physician; therefore be it

Resolved, That the Kansas Medical Society review this matter with the director of the Kansas Workers Compensation Program; and be it further

Resolved, That if deemed necessary, KMS draft and request introduction of appropriate legislation which would permit job task analysis to be performed by non-physicians possessing the needed skills and training under the direction of a physician.

RESOLUTION 96-21 *Reporting of Substance Abuse*

Whereas, Health care providers are required to report certain injuries and illnesses to the appropriate law enforcement agency (e.g. gunshot wounds, stab wounds, assaults, reportable diseases); and

Whereas, This is recognized as being for the good of society and such reporting is provided immunity from prosecution for violating the doctor-patient confidentiality; and

Whereas, There is no such immunity or protection for the health care provider who recognizes the incapacitation of a driver from substance abuse; and

Whereas, The health care provider may be held responsible for not taking action to prevent this person from driving while under the effects of abusive substances; therefore be it

Resolved, That the Kansas Medical

Society draft and request introduction of legislation that would provide immunity from prosecution for health care providers who report the suspicion of substance abuse by persons who have been or can be expected to operate a motor vehicle while under the effects of abusive substance to the appropriate law enforcement agency; and therefore be it further

Resolved, That the Kansas Medical Society support the concept of routine breath analysis of all drivers involved in motor vehicle accidents. This testing would be performed by the investigating officer and thus remove the health care worker from policing for DWI violations.

RESOLUTION 96-22 *Student Athletic Examinations*

Not adopted

RESOLUTION 96-23 *Mandated Medical Screening Examinations*

Whereas, The Comprehensive Omnibus Budget Reconciliation Act/Emergency Medical Treatment and Active Labor Act (COBRA/EMTALA) legislation requires that every patient presenting to a hospital based emergency department must receive an adequate medical screening exam to rule out the presence of an emergent medical condition or active labor; and

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Whereas, More and more third-party payors are requesting prior authorization before authorizing treatment at these hospital based emergency departments and are frequently asking that the patient be screened but not treated; and

Whereas, Most third-party payors are refusing to reimburse for this mandated screening exam; therefore be it

Resolved, That the Kansas Medical Society draft and request introduction of legislation which provides that any contract or policy for individual or group accident/health insurance issued in this state and any contract issued by a managed care or health maintenance organization authorized to transact business in Kansas shall reimburse for all physician provided and ordered services which are necessary to conduct the medical screening examinations and stabilizing treatment required pursuant to Section 1867 of the Social Security Act.

RESOLUTION 96-25

Associate Membership Requirement for KaMMCO and Heartland Health

Not adopted; combined with 96-11.

RESOLUTION 96-26

Physician Involvement in the Dying Process

Whereas, Assisted suicide is the intentional advising, encouraging or assisting another person in the taking of his or her own life, which is illegal in Kansas; and

Whereas, Support, comfort, respect for patient autonomy, good communication, and adequate pain control are essential elements of the physician's role in the care of patients in the end stages of life; and

Whereas, Decisions near the end of life should be made by the patient and family in consultation with their physicians and other family advisors or counselors; therefore be it

Resolved, That it is the position of the Kansas Medical Society that;

1. Physician assisted suicide is fundamentally inconsistent with the physician's professional role;
2. The principle of patient autonomy requires that physicians

must respect the decision to forego life-sustaining treatment by patients who possess decision-making capacity;

3. There is no ethical distinction between withdrawing and withholding life-sustaining treatment at the patient's request;
4. Physicians who care for patients with terminal illnesses should seek to educate themselves about advanced pain management techniques;
5. Physicians have an obligation to relieve pain and suffering and to promote the dignity and autonomy of dying patients in their care, including providing palliative treatment even though it may foreseeably hasten death; and
6. When the treatment goals for a patient in the end stages of a terminal illness shift from curative efforts to comfort care, the level of physician involvement in the patient's care should not decrease.

RESOLUTION 96-27

Violence in Kansas and the United States

Whereas, Violence is increasing in Kansas and the U.S.; and

Whereas, Violence is one of the state's greatest threats and the largest cause of disability; and

Whereas, The death toll from guns due to homicide and suicide in the U.S. in 1992 was 35,959. The death toll from auto accidents in 1993 was 44,000. The number one causes of brain injury deaths are firearms and auto accidents; and

Whereas, The social, economic and human costs of caring for those left disabled by violence is incomprehensible: \$1.4 billion for 3000 spinal cords per year; and

Whereas, Incarceration is not working to decrease violence and crime in our society and is very expensive: \$55 billion per year for implementation for "3 strikes and you're out" in California. Texas has executed convicts more efficiently than any state, yet its murder rate remains one of the nation's highest; and

Whereas, Criminal justice institutions are now public health agencies; and

Whereas, Prevention is the main antidote to decrease violence

and crime; and

Whereas, The Injury Registry was established by the CDC to track hows, whys and results of violence and get accurate statistics; and

Whereas, Both Kansas and Missouri federal senators have declared this “too much government” and vowed to eliminate the registry funding, \$2.3 million per year; therefore be it

Resolved, That KMS encourage Kansas physicians and promote the Kansas Death and Injury Secondary to Violence Registry by working toward identifying acts of violence, reasons and means of violence and address prevention of those acts.

RESOLUTION 96-28

Peer Review by State Disciplinary Agencies

Whereas, Physicians are expected and required to make decisions which have dramatic importance for patients whom we serve, especially those at the end of life; and

Whereas, Many decisions physicians make on behalf of their patients are of such complexity that only other physicians are capable of conducting an adequate review of the appropriateness of such decisions; and

Whereas, Various state disciplinary and law enforcement agencies should have a process for obtaining qualified peer review prior to

proceeding with prosecutions in complex cases; and


Whereas, A recent court ruling has the potential of creating a precedent of criminalizing negligence, thus placing physicians in jeopardy for making difficult patient care decisions, especially involving end of life issues; therefore be it

Resolved, That the Kansas Medical Society initiate a dialogue with the Kansas State Board of Healing Arts, the Kansas Attorney General and other appropriate agencies to discuss the importance of obtaining qualified peer review prior to making a decision to prosecute cases which involve complex medical decisions, especially in dying patients; and be it further

Resolved, That the Kansas Medical Society also express its grave concerns over the criminalizing of clinical negligence. **KMS**

Council District reports to the 1996 House of Delegates

COUNCIL DISTRICT 1



The annual district meeting was held in Atchison in October, 1995. Representatives from all three component medical societies including Northeast Kansas, Atchison County and Leavenworth County were present. This meeting hosted our Kansas Medical Society (KMS) President, Dr. Linda D. Warren. Topics discussed included Heartland Health, improving communication with the University of Kansas Medical School, development of a Western Kansas KMS field office which would be shared by KaMMCO, recruitment of new physician and medical student members, and the general state of affairs of medicine in the Northeastern medical corridor. Elections were held and Dr. Vernon A. Mills replaced retiring councilor, Dr. John R. Eplee. Dr. A.K. Tayiem assumed the post of alternate councilor.

As a member of Heartland Health Board of Directors, I gave advice and supported the development of a statewide physician network and insurance company that would be responsive to physicians, patients, and market needs. Heartland's Medicaid managed care product, Horizon's PrimeCare, will be offered in District 1 this fall.

There have been successful efforts in the district to improve access to health care in the rural counties by initiating rural health care clinics. Physicians in the Northeast Kansas Medical Society report very good community support for local physicians' efforts to provide needed care.

In Leavenworth County, there have been significant efforts by hospitals and insurance companies to organize physicians, and although managed care has made significant market penetration, most physicians remain in private practice. Many of the county physicians are becoming more economically and politically aware and becoming significant advocates for their patients and their medical practices.

Vernon A. Mills, MD, Councilor

COUNCIL DISTRICT 3

The focus of the Johnson County Medical Society continues to be on the following projects: Annual Legislative Dinner, Annual Legislative Breakfast, Physician Preceptor Programs, Healthy Kids Council, and quarterly general meetings.

The Healthy Kids Council planned a day of continuing education for school nurses, teachers, social workers, and counselors on Thursday, August 3, at the Johnson County Community College. The Healthy Kids Council is a coalition of the Johnson County Medical Society and its Alliance, the Johnson County Community College, the county hospitals, schools, and the health department. Their mission statement is "striving for solutions to healthcare challenges of Johnson County youth."

The Annual Legislative Dinner was held at the Overland Park Doubletree Hotel. The speaker was Christian Hageseth, MD. The Legislative Breakfast, hosted by the Mid America Rehabilitation Hospital, was a roundtable forum with the physicians and legislators.

A Physician Preceptor Program was held conjointly with Metropolitan Medical Society. Tom Williams, MD, continues as the chairman of the program.

Regina Nouhan, MD, and Jeremy Baptist, MD, were judges for the Greater Kansas City Science Fair. William McEachen, MD, presented certificates and prizes to the first and second place entries under the name of "The Physicians of Greater Kansas City." Johnson County, Metropolitan Medical, and the Jackson County Osteopathic Societies each provided two judges for the biological division of awards.

Linda Warren, MD, President of KMS, and Lisa Barker, President of the KMS Alliance visited Wyandotte and Johnson Counties in February.

The Office Personnel continues to meet on the fourth Tuesday over lunch in an area restaurant. Roundtable group discussions are held regarding pertinent topics in healthcare.

Our President is Tom G. Sullivan, MD.

Lawrence D. Riffel, MD, Councilor

COUNCIL DISTRICT 4

This district consists of three independent county medical societies: Bourbon, Crawford-Cherokee, and Labette. Bourbon County Society meets in Fort Scott and Mark Carlson, MD, is President; Crawford-Cherokee County Society meets in Pittsburg with Kathleen Sandness, MD, as President; and Labette County Society meets in Parsons with Radha Pai, MD, as President.

Each of the societies meets for the primary purpose of conducting continuing medical education activities. The

Crawford-Cherokee and Labette County Societies meet monthly, while the Bourbon County Society meets every other month.

Several physicians from the Labette County Society have been active in the Kansas Medical Society, serving on the Council, various committees, and one serving as AMA delegate. The Labette County Society has also provided scholarship funds for the local nursing program at Labette Community College. The physicians of the Crawford-Cherokee County Society continue to monitor the local ambulance service, providing review and evaluation functions.

Daniel N. Pauls, MD, Councilor

COUNCIL DISTRICT 5

Our educational program at the April, 1995 meeting of the Society was presented by Tom Norton, Vice-President, Government Affairs, Searle Labs. His presentation was entitled, "The Aftermath of Healthcare Reform."

At the May 1995 meeting, Jeff Curtis, MD, gave a "Cardiovascular Update." Bob Cathey, M.D., presented the Councilor's report. The annual Riley County Medical Society picnic was held on Saturday, June 24, 1995, at the Optimist Park here in Manhattan.

The annual visit of the KMS President, Linda Warren, MD, and the KMSA President, Lisa Barker, was the highlight of our October meeting. In November, the Society sponsored a trip to Topeka to see the Treasures of the Czars.

At the January, 1996 meeting Debra Doubek, MD, was elected President of the Riley County Medical Society; Douglas Foulk, MD, was elected Vice-President and Donald Huang, MD, was elected Secretary-Treasurer.

The February educational program was presented by Stephen A. Chartrand, MD, "Facing the Challenge of Microbial Resistance: The Respiratory Tract."

In March of this year, a slide presentation, "A Medical Mission to Russia," was given by our own Anne Wigglesworth, MD. Eugene A. Klingler, MD, Earlene Gould, C.R.N.A., and Gay May, RN. In April, Doctor Jim Gardner, MD, was elected as Councilor of District 5.

Robert H. Cathey, MD, Councilor

COUNCIL DISTRICT 6

This is my first annual report for the KMS Council. I have fully enjoyed my year as the district councilor and am looking forward to the coming year.

This has been a year of change for Shawnee County Medical Society and the change is ongoing. In spite of the change, we have been able to continue with many of our

COUNCIL DISTRICT REPORTS TO THE 1996 HOUSE OF DELEGATES

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community activities.

Our annual meeting was in June and was again held in Ward Meade Park. KMS President, Linda Warren, MD, was the guest of honor and the primary speaker. The park is of special interest because the Society is a joint sponsor with Ward Meade and the Shawnee County Dental Association in the construction of a turn-of-the-century drugstore, soda fountain and pharmacy. A physician and a dentist office are also a part of the building. The project is progressing satisfactorily with much of the structure now open to the public.

SCMS sponsored two seminars titled, "Coping With Stress" and "Change in the Medical Office." The seminars were presented by Jerry Johnson in November and February. The events were open to physicians, their spouses and employees. The response of those attending was excellent.

The Summer Fiesta was in July. This was a social evening that was jointly sponsored by Shawnee County Medical Society and the Medical Alliance. The event was held at the home of Dr. S.K. and Sue Gandhi. There was a good turnout and everyone enjoyed themselves. The Senior Section continues to meet the second and fourth Friday of each month for coffee and doughnuts. The group has been extremely supportive of recruiting residents into membership in the society. The meetings have again proved to be a source of genuine satisfaction for the members of the section.

As in past years, SCMS has been a sponsor for the National Youth Sports Program at Washburn University. We are represented on the advisory board, and society members provided free physicals to over 200 underprivileged youths who

meet federal poverty guidelines.

SCMS has actively supported the Race Against Breast Cancer. There is a representative of the society on the Board of Directors and the Society has assisted in many RABC activities through the year. We were co-sponsors of Breast Cancer Awareness Month (October) and helped bring Marcia Wallace, a breast cancer survivor and actress, to Topeka for a presentation. The society co-sponsored the annual race and presently is donating office space for the official RABC office.

In October, the Society helped bring Robert Keeshan, TV's Captain Kangaroo, to Topeka for a presentation. This was a part of our support for the Governor's Conference on Child Abuse.

The Women's Section of SCMS co-sponsored the annual program, "What Do You Want To Be When You Grow Up?" Members staffed a booth at the program/meeting, where literature was available and young people interested in becoming physicians were able to ask questions.

In cooperation with Shawnee County Health Department and other community agencies, the Society has worked on the Immunization Task Force. This group works to plan and present the annual Immunization Day in the community.

Significantly, Shawnee County Medical Society has been engaged in a reorganization process this year. The membership voted to reduce dues dramatically. This has necessitated a number of changes which will clearly affect the activities of this society. Our Executive Director, Byron Cook, left the organization and the board is struggling with ways to reduce overhead to meet the budget provided by the current dues.

A special broad based committee of the membership has been formed to revise the mission and objectives of the society. It is a turbulent time but we are optimistic that the society, with new direction, will be better able to meet the needs of the membership.

Thomas Coolidge, MD, Councilor

COUNCIL DISTRICT 7

Since my election there have been no major changes in the medical community. The election of officers is as follows: Herbert Brahman, MD, President; Norman Fordyce, MD, Secretary/Treasurer; and Michael L. Montgomery, MD, Program Director.

Linda Warren, MD, President of the Kansas Medical Society, was the guest-speaker at the November, 1995 Council District meeting.

Nelson P.H. White, MD, Councilor

COUNCIL DISTRICT 8

Activity this past year has been highlighted by the visit in September of 1995 by our KMS President, Linda Warren, MD, from Hanover. Dr. Warren explained the objectives and items of her agenda for the new year and also several aspects of the legislative program.

A highlight of the meeting was a visit from Mrs. Lisa Barker, KMSA President. She outlined her program for the coming year and the appropriateness of developing new programs. One of the most pressing issues is membership and participation.

The Cowley County Medical Society holds monthly meetings and has a Scientific Program sometimes sponsored by the University of Kansas School of Medicine-Wichita. Also, some

of our programs have been sponsored by pharmaceutical companies. We are striving to enroll every physician in Cowley County, but so far have not been successful. We do have several members that are members of the AMA. Arkansas City has been working diligently to recruit new physicians. We do have some consultants from Wichita and Ponca City, Oklahoma. We are now working on building a Dialysis Unit next to our local hospital and this will be manned by a Nephrology group from Wichita.

The Snyder Clinic in Winfield has added some new physicians recently and the hospital had a full-time psychiatrist on board as of June 1995.

Participation in the Heartland Health Network is moving forward with credentialing, and we are all looking forward to a great relationship.

Newton C. Smith, MD, Councilor

COUNCIL DISTRICT 9

In October of 1995, after months and even years of negotiation and work, both of Salina's hospitals (formerly Asbury Regional Medical Center and St. John's Hospital) have merged to form the Salina Regional Health Center. Both hospital sites continue to be utilized and are designated as the Santa Fe Campus and Penn Campus. While the type of services that will be offered at each site is still under evolution, the Santa Fe Campus presently handles all of the inpatient admissions, surgery, and emergency services while the Penn Campus offers ambulatory services, skilled nursing and respite care.

Also in October of 1995, the Santa Fe Medical Plaza office building was opened and occupied. It is located directly across the street from the Santa

Fe Campus. The new residents include the Salina Clinic, Smoky Hill Family Practice Residency Program, Salina Urology Associates, the Orthopedic Clinic of Salina, Salina Regional Health Center Outpatient Physical Therapy, and Physical Medicine and Rehabilitation.

In the last year, the Smoky Hill Family Practice Residency Program has graduated five residents and all of these physicians will remain in Kansas to practice. The program has been in existence now since 1978 and is approved for all three years of family practice training. Since its establishment, over 70 percent of all graduates have remained in Kansas, mostly serving rural areas of Kansas. All of the graduates have become board certified in family practice.

The North Central Kansas PHO is now into its second year of operation. It was established in February of 1995 and has recently hired Mr. Ivan Gatenbien as the Director. Mr. Gatenbien is presently working to structure products to market for the PHO. Presently, there are 16 hospitals and approximately 90 physicians associated with the North Central Kansas PHO.

Alan L. Kruckemyer, MD, Councilor

COUNCIL DISTRICT 10

District highlights included a visit from KMS President, Linda Warren, MD; her husband, Roger Warren, MD; Mrs. Lisa Barker, President of KMS Alliance; and Ms. Carolyn Price of the KMS staff, at the Old Mill Restaurant in Newton in November, 1995. Issues of interest to physicians and their spouses were discussed.

Throughout the remainder of the

year regular medical society meetings have been held in Harvey and Reno Counties, in conjunction with the hospital quarterly staff meetings. Issues of interest include construction of a new Newton Medical Center and proposed sale of Halstead Hospital to Columbia.

Kenneth Kimmel, MD, Councilor

COUNCIL DISTRICT 11

The activities of the Medical Society of Sedgwick County continue to increase in terms of both numbers and complexity. The MSSC's membership at the end of 1995 totaled 975, of whom 801 are actively practicing physicians.

During the year, considerable energy and funds have been expended in efforts to develop a cooperative Medicaid managed care program (CCK) involving the four Wichita hospitals, as well as hospitals and physicians in Bourbon, Finney and Montgomery counties. Final negotiations between CCK and the State Department of Social and Rehabilitation Services are now being considered by Governor Bill Graves.

Through the Earl Mills Trust, established in the memory of Dr. Earl Mills, a high level medical educational seminar is being planned. The program, being coordinated through University of Kansas School of Medicine-Wichita and the other responsible trust entities, will be held during October, 1996, to which all Kansas physicians will be invited.

The MSSC is participating in a community health needs assessment program being carried out by Wichita State University School of Health Sciences, University of Kansas School of Medicine-Wichita, and the Wichita/Sedgwick County Department of Community Health, and funded through

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the Kansas Health Foundation. This program is to identify unmet needs, available resources and to develop recommendations concerning how the identified needs can be resolved.

Following the Oklahoma City bombing disaster, many of the MSSC members contributed to the Disaster Relief Fund coordinated by the Oklahoma County Medical Society.

In cooperation with the area pharmacists, the "Pharmacy Hotline" was reorganized in 1992, whereby information can be distributed to all area pharmacies within ten minutes. During 1995, 114 potentially fraudulent situations were disseminated.

Other day-to-day activities related to Emergency Medical Services, Medical Careers Loan Fund, Medical Student Emergency Loan Fund Program, Medical Service Bureau, Physician Paging System, Physician Information Verification Program for area hospitals and managed care programs, Legislative Issues, SedgPAC, Medical Review Foundation, WPPA, Employee Assistance and Behavioral Health Care Management, and the Sedgwick County Health Care Cost Containment Roundtable.

James A. Loeffler, MD, Councilor

COUNCIL DISTRICT 13

Dr. Linda Warren addressed the CKMS membership at our fall meeting in October, 1995. Current events and issues regarding Heartland Health marketing efforts as well as other state and national events were discussed.

The medical community of the CKMS area continues to grow as more new physicians have entered the community in the last year. Physicians

were recruited in the disciplines of neurology, family practice, internal medicine, and pulmonary and infectious diseases.

CKMS continues its long term commitment to support Fort Hays State University by funding support for pre-med student scholarships.

During the fall meeting in October, 1995, new officers were elected. Officers are Dr. Donald Tillman, President; Dr. John C. Pokorny, Vice-President; and Dr. Cindy Brenner, Secretary/Treasurer. District Representative Greg Woods, MD, and Howard Wilcox, MD, were selected to attend the Annual Meeting in May 1996.

Ward M. Newcomb, MD, Councilor

COUNCIL DISTRICT 14

The Barton and Pawnee County Medical Society held its annual meeting in June, 1995 at the Great Bend Petroleum Club. Richard Preston, MD, was re-elected President, and Perry Schuetz, MD, continued in his term as Councilor. Perry Smith, MD continues as Secretary/Treasurer.

The highlight of the meeting was the address by newly-elected KMS President, Linda Warren, MD. This was one of her first outings in her presidential role, and she was a great hit.

Most of the physicians of Barton-Pawnee counties are shareholders in Heartland Health. There is much discussion locally of forming an HMO in conjunction with the Central Kansas Medical Center.

Integrating Heartland Health into this plan is a current topic of much local interest.

Although several new physicians have come into our counties, there still remain some shortages in primary care. David Wahbeh, MD, in pediatrics; Bill Slater, MD, in general surgery; Robin Durrett, DO, in general surgery; and Nehal Masood, MD, in family practice, are some of our new physicians. Bill King, MD, retired in the past year while in good health and is getting a chance to do those things we are all putting off. John Edmonds, husband of Marta Edmonds, MD, is our local state representative and has been a good friend of medicine.

Perry N. Schuetz, MD, Councilor

COUNCIL DISTRICT 18

Council District 18 met in March, 1996 at the University of Kansas Alumni Center in Lawrence, Kansas, with representation of surrounding counties. The President of the KMS Alliance, Lisa Barker, and Dr. Linda Warren, President of KMS, gave reports of progress of the Alliance and the Kansas Medical Society.

The Lawrence Community Health Plan, a joint effort between the physicians of Lawrence Memorial Hospital staff and the hospital, provides

The highlight of the meeting was the address by KMS President, Linda Warren, MD. . . . She was a great hit!

**Perry Schuetz, Councilor
Council District 14**

an insurance product and is now in full swing and continues to grow and become more competitive. There is a very competitive market in Douglas County with the addition of three HMOs and numerous PPOs and other insurance programs. Competition is intense and the physicians are feeling a tremendous pressure of insurance companies having control over our patients. This trend is obviously going to increase and the concern of most physicians is growing in regard to what the future holds.

The Lawrence Memorial Hospital made a decision not to enter into a sale contract with Columbia or any other health care providing group at least at the present time. The hospital has made a marvelous new expansion and remains profitable and competitive, while at the same time Columbia has been threatening to build a second hospital in Douglas County. Columbia has purchased at least two physician groups in Douglas County and it appears to be interested in a third group. All in all, the entire medical market of Douglas County is highly competitive and physicians are being swept along in the current.

Phillip A. Godwin, MD, Councilor

A moment of silence . . .



STUART C. AVERILL, MD

Dr. Averill, 72, a Topeka psychiatrist and past director of the C.F. Menninger Memorial Hospital, died August 8, 1996 in Topeka.

Dr. Averill, who was recently named director of the psychoanalytic clinic at the hospital, spent 18 years as clinical director of the Boys Industrial School.

He was born May 31, 1924 in Sacramento, California and grew up in Dixon, California. He attended John Hopkins University and took a leave for three years to serve in the U.S. Navy. He returned to California and was graduated from the University of California at Berkeley and the University of California Medical School.

He married Elizabeth "Tucker" Walter in 1946. She survives.

Dr. Averill was a member of the First Congregational Church. He was also a past president of the Shawnee County Medical Society and held memberships in the Kansas Medical Society, the American Psychiatric Society, and the American Psychoanalytic Society.

PAUL B. BURGER, MD

Dr. Burger, 71, a Shawnee family physician, died June 28, 1996.

He was born in Kansas City, Kansas and lived in the area most of his life. Dr. Burger graduated from St. Louis University Medical School and went into private practice. He was on staff at Shawnee Mission Medical Center and courtesy staff at Providence Medical Center.

His wife of 47 years, Donna, survives.

Dr. Burger was past president of the St. Mary's Hospital Staff and served as the Shawnee Police Department physician until his death. He received the Kansas Monk Award

from St. Benedict's College in 1968. Dr. Burger was a member of the Kansas Medical Society and a past president of Kansas Right to Life.

COURTNEY CLARK, MD

Dr. Clark, 66, a Wichita anesthesiologist, died July 27, 1996. He is survived by his wife, Katharine.

DAVID R. DAVIS, MD

Dr. Davis, 93, an Emporia pediatrician, died August 3, 1996.

He was in general practice from 1930 until his retirement in 1978. He practiced medicine in the farm communities around Olpe, Kansas.

Dr. Davis received his medical degree from Tulane University in New Orleans. He served his internship at Kansas City General Hospital and Children's Mercy Hospital in Kansas City, Missouri.

He was a U.S. Navy veteran of World War II, and a member of the Navy Reserve until he retired in 1963 with the rank of captain.

Dr. Davis married Dorothy L. Jennings in 1929. She preceded him in death in 1993.

He was a member of the Westminster Presbyterian Church and a charter member of the DeMolay and Blue Lodge. He was past president and member of the board of the American Academy of Pediatrics, past president of the Flint Hills Medical Society, staff member emeritus and president of Newman and St. Mary's hospitals, and chairman of the Child Welfare Committee of the Kansas Medical Society.

He was also active with the Boy Scouts of America, the Emporia Chamber of Commerce, Emporia Youth Camp, Camp Alexander, the

College of Emporia, Aberdeen Angus Association, American Legion, Lions Club, and the Outlook Club.

CALVIN W. HENNING, MD

Dr. Henning, 90, a retired Ottawa physician, died May 29, 1996 in Topeka.

He received his medical degree from Kansas University Medical School in 1935.

Henning set up a medical practice with his brothers in 1936. He retired in 1986 after 50 years of practice in Ottawa and remained there until entering a Topeka nursing home in March 1995.

Dr. Henning married Luella A. Downing in 1931. She preceded him in death in 1973. He then married Betty Silvius in 1976. She survives.

He was a member of Kiwanis for over 50 years, had served as Kansas lieutenant governor and was one of only four Kansas Kiwanians ever to be named a Hixson Fellow. He was also a member of the American Medical Association, the Kansas Medical Society, Franklin County Medical Society, Masons, and Lawrence Scottish Rite.

HERBERT H. HESSER, MD

Dr. Hesser, 89, a retired Overland Park surgeon, died May 7, 1996.

He was born July 31, 1906 in Kansas City, Kansas and he lived there most of his life. He graduated from the University of Kansas School of Medicine in 1934. After serving an internship at St. Margaret Hospital, he engaged in the practice of family medicine before entering training in surgery at the University of Pennsylvania, where he

received a Masters degree.

His wife of 58 years, Amelia S. Hesser, survives.

Dr. Hesser was a diplomat of the American College of Surgery and was a Fellow in the American College of Surgeons. He was a member of the Kansas Medical Society, the Armourdale Masonic Lodge #271, the Scottish Rite Masonic Bodies, and the Abdallah Shrine.

CHARLES S. JOSS, SR., MD

Dr. Joss, 82, a retired Topeka surgeon, died June 24, 1996.

He was born February 20, 1914 in Topeka. He received his medical degree from Northwestern University Medical School in 1940. He was a Fellow in surgery at the Mayo Foundation in Rochester, Maine for two years, before entering the U.S. Army in 1942 as a medical officer. He was discharged in 1945. Two years later, he returned to Topeka and established a surgical practice with his father.

Dr. Joss was married to Doris Firestone. She preceded him in death in 1995.

He was past president of St. Francis Medical Staff, and a member of the Shawnee County Medical Society and Washburn University Board of Regents. He was also a member of the Kansas Medical Society, American Medical Association, and the Southwestern Surgical Congress.

RAYMOND A. SCHWEGLER, MD

Dr. Schwegler, 88, a retired

gynecologist and University of Kansas professor, died July 16, 1996 in Lawrence.

He practiced medicine in Lawrence until 1956, and he later served as the medical director of the Student Health Services at the University of Kansas. He was also a clinical professor of obstetrics at the University of Kansas Medical Center.

Dr. Schwegler received his medical degree and his PhD in anatomy from the University of Minnesota.

He married Alice Josephine Wilson in 1935. She survives.

Dr. Schwegler served in the Army Medical Corps as a major during World War II.

He was a member of AOA Honorary Society and he served on the financial advisory board of the Bert Nash Mental Health Center. He was also a member of the Kansas Medical Society, the Douglas County Medical Society, the American College of Surgery, the Central Association of Obstetrics & Gynecology, and the American College of Obstetrics. He also served on the board of the Douglas County Health Department.

Dr. Schwegler was a 32nd Degree Mason and a member of the Old and New Club and Trinity Episcopal Church.

CHESTER E. SCOTT, MD

Dr. Scott, 72, a retired Salina family physician, died June 3, 1996.

He was born July 3, 1923 in Peabody and had been a resident of Salina since 1952. Dr. Scott practiced medicine in Salina for 36 years.

Dr. Scott's wife, Marie Ellen, survives.

A MOMENT OF SILENCE

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He was a Navy Veteran of World War II. He was also a member of the Christian Medical and Dental Association, Saline County Medical Society, Kansas Medical Society and American Medical Association. He was a member of Sunflower Lions Club, Fellowship of Christian Athletes, Gideons, Salina First United Methodist Church, and American Academy of Family Physicians.

LOUIS N. SPEER, MD

Dr. Speer, 81, a retired Ottawa general practitioner and surgeon, died June 3, 1996 in Ottawa.

He practiced in Ottawa for 50 years. Dr. Speer was a staff surgeon with the 110th Tactical Reconnaissance Squadron in the Asiatic Pacific area during World War II. He was discharged with the rank of Major in 1946.

Dr. Speer graduated from Northwestern University School of Medicine in 1941 and completed his surgical residency at Jackson County Hospital, now the Truman Medical Center of Kansas City, Missouri.

He was married to Jessie Roberta Davis. She preceded him in death in 1990.

Dr. Speer was a member of First United Methodist Church in Ottawa. He was a member of the Kansas Medical Society, as well as Ottawa Lodge No. 803 of the Benevolent and Protective Order of the Elks, where he was past exalted ruler. Dr. Speer was a charter member of the Flying Physicians Association, American Bonanza Society, OX5 Club, and the Quiet Birdman Club. He was a member of Delta Tau Delta social fraternity and Phi Beta Pi medical fraternity.

CHARLES L. WHITE, MD

Dr. White, 89, a retired Great Bend general practitioner, died May 17, 1996 in Quincy, Washington.

He graduated from the University of Kansas School of Medicine in Kansas City, Kansas in 1936. He practiced in Great Bend for 26 years and moved to Quincy in 1989.

Dr. White was married to Madaline S. Harrison. She preceded him in death in 1980.

He was a past president of Kansas Academy of Family Physicians and Kansas Association of General Practitioners, as well as a life member of the Masonic Lodge and Elks Fraternity.

FREDERICK P. WOLFF, MD

Dr. Wolff, 75, a retired internal medicine physician, died June 19, 1996.

He worked in Pratt for 40 years until he retired in 1988. He was a partner in the Black-Wolff Clinic and was Pratt's health officer for 34 years. Dr. Wolff was a past president of the staff of Pratt Regional Medical Center and started one of the first coronary care units in the state. He started Pratt's home health program and also started a five-county hospice in 1988.

He received his medical degree from the University of Kansas Medical School.

He served in the U.S. Army Reserve and Naval Reserve during World War II and the Korean War.

Dr. Wolff was married to Elizabeth Jane Drohan. She preceded him in death in 1993.

He was a member of the Methodist Church and a charter member of the Church of the Resurrection. He was active in the Boy Scouts of America and belonged to many civic organizations, including the VFW, American Legion, Elks, and Rotary Club. He was president of both the Optimist Club and the Jaycees.

Dr. Wolff was a member of the Kansas Medical Society. He was state president of both the Kansas Society of Internal Medicine and the Kansas Health Officers Association. He was on the boards of the local heart, cancer, arthritis, polio, and lung associations. He also served on several national committees for the American Society of Internal Medicine. **KSM**

*The American Medical Association
Organized Medical Staff Section*

Caring doctors.

You want the best for your patients. You give them the kind of attention and quality care they deserve and they trust you with their lives. This is the patient-physician relationship you want to protect.

Part of managed care.

As a participant in a managed care plan, you still give your all for your patients and want to provide the highest quality care. But the patient-physician relationship you value is facing some special challenges. The health care environment is changing and so are the rules.



Shaping the future of health care.

You can help formulate those rules and take an active role in the future of your profession as a part of the AMA Organized Medical Staff Section (OMSS).

This section is an expansion of the Hospital Medical Staff Section. It now embraces the growing number of physicians in managed care. The OMSS offers assistance, representation, and a strong, unified voice within these organized settings.

The OMSS is a forum for identifying and initiating policy on issues including: fairness and due process rights, continuous quality improvement, peer review, resource/utilization management, ethics, and leadership.

Any medical staff of a hospital, integrated delivery system, or health care plan may designate an OMSS representative, who

must be an AMA member with active medical privileges. Each staff has one vote — an equal voice, regardless of size.

If you are interested in designating an AMA OMSS representative and/or attending an upcoming meeting, call **800 AMA-3211** and ask for the AMA Department of Organized Medical Staff Services.

We cannot begin to confront the unique challenges facing us without you. Call **800 AMA-3211** today.

The Voice of Grassroots Physicians.

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Physicians dedicated to the health of America



The last word . . . on managed care

*As managed care
becomes a
“fact of life”
in Kansas,
what are your
feelings about being
part of that system?*

Physicians still hold the trump card—we’re the ones who know how to get the patient well. To ignore managed care is to ignore that one huge advantage we still hold, and to by default pass it on to those whose allegiance may be to an oath that is less than Hippocratic. If we are true to our patients (and thereby to ourselves), we must realize that managed care is just that latest “fact of life” and by no means the last. Never forget—managed care needs us. Our patients need us. Do not sell yourself short, or the welfare of your patient population, by an attitude of invincibility or isolationism.

*Roger R. Tobias, MD
Family Practice
Lyons*

Scorecard medicine is here to stay. We are at a crossroad regarding who will make medical decisions for our patients. It is time for physicians to unify and retake control of medical decision making. In the past, whenever physicians have been asked to form a firing squad—we formed a circle! We must continue to be advocates for quality patient care. As a physician, I will adapt to the managed care system.

*Frank H. Griffith, MD
Ophthalmology
Salina*

Technology has driven our healthcare system for the past twenty years. Now the new driver is economics. Although physicians are uncomfortable about this aspect, we owe it to our patients and ourselves to continue to be a major player in the decision making of this system.

*Jimmie A. Gleason, MD
Obstetrics & Gynecology
Topeka*

I can summarize my feelings about managed care in three words: regret, opportunity, and challenge.

I regret the loss of provider control of the health care system. While I have some knowledge of the market forces shaping the new health care system, understanding is small comfort to my loss of professional autonomy. I now practice knowing my clinical decisions are going to be monitored, constrained, and second-guessed.

Any time major system changes occur, opportunities and challenges arise. We have a good start in Kansas: WPPA with ten year’s history and 145,000 covered lives plus Heartland Health with strong statewide grassroots support and synergy. The challenge is to have the vision and staying power to play a significant and/or dominant role in the next decade.

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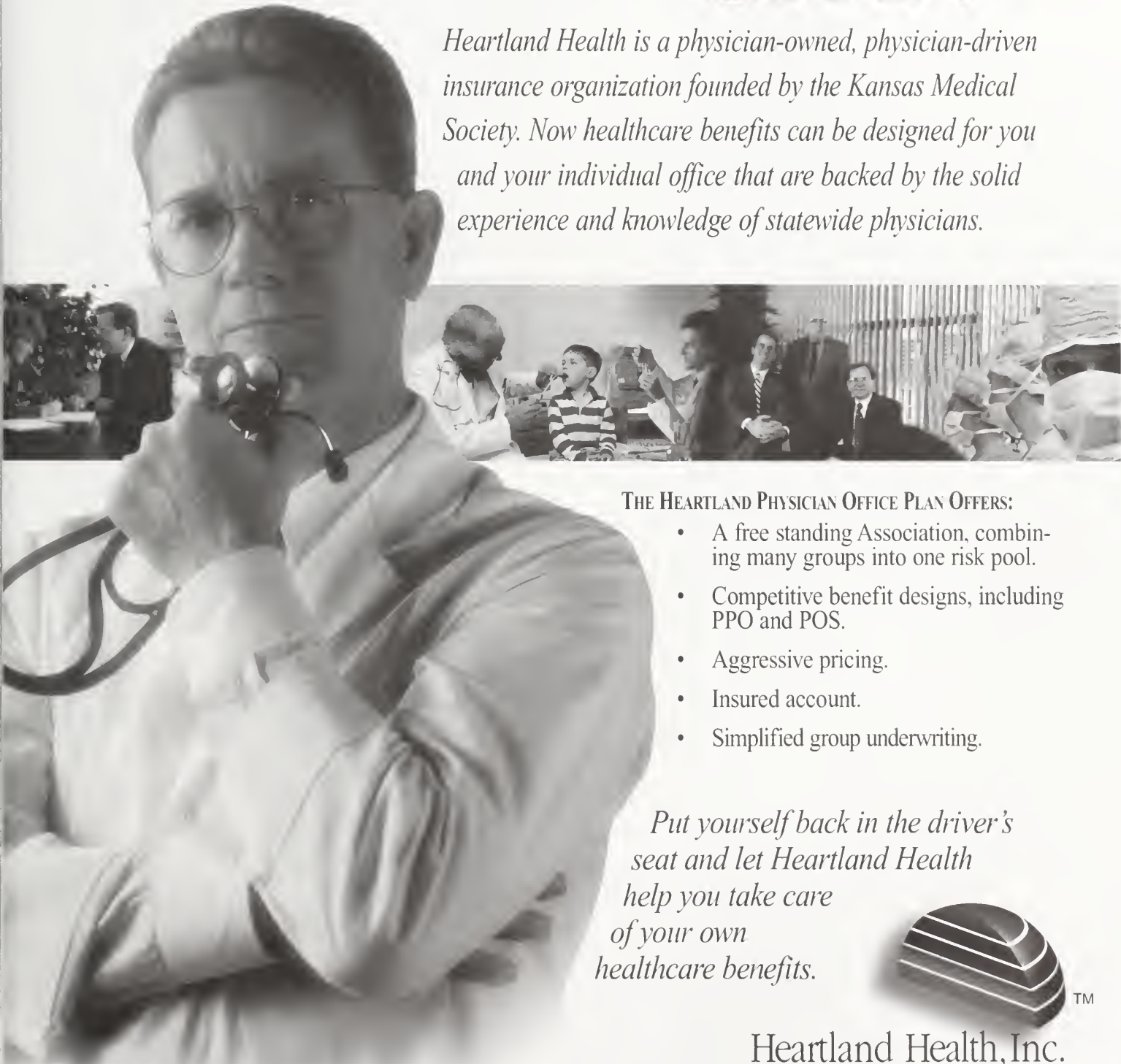
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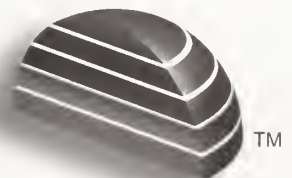
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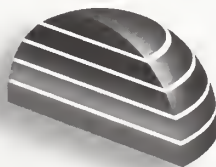
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What's up, doc?

Warren E Meyer, MD



BUGS BUNNY'S PERENNIAL QUESTION directed to Elmer Fudd is also appropriate for today's physicians. Patients are confused and might use the phrase in seeking information from their doctors about the puzzling, topsy-turvy world of health care reform—and what the eventual outcome will mean to their own health care. Physicians themselves may ask this question of their colleagues as they see their world in danger of evaporating around them. At this time, the crystal ball remains clouded (probably due to one of those smoke-filled rooms,) and no definitive path is apparent.

Many things have occurred in the field of health care in recent years, things undreamed of only a few years ago. *Popular Mechanics* had an article on robotics, detailing the way in which the computer can assure the proper insertion of a hip prosthesis better than the physician alone. The CT scan, the MRI, laparoscopic diagnosis and surgery, "robotic surgeons," telemedicine, and other modern advances have changed the "traditional" practice of medicine. We all realize that medicine, as it was practiced, will change to accommodate new advances and challenges. In one way we are responsible for some of the factors at work in the evolving health care industry. It would appear that soon, our practices may resemble the infirmary on Star Trek.

The insurance industry is another factor influencing the total health care picture. One spokesman has said, "The patient is not the doctor's customer; the insurance company is." Sixty-nine

percent of physicians work for third-party payors, and almost all have agreements with one or more insurance plans. In some cases, these companies are physician-owned and managed (or supposedly so), others are not. The spiraling costs of medical care have finally hit home and America's response, at this point, has been "managed care."

Managed care is a process whereby patients are carefully programmed into a cost-containing environment utilizing a variety of tools such as primary care, early discharge from hospitals, reduced fee for service, and health maintenance organizations, to name just a few. HMOs, PPOs, IPAs, PMAs, and MSOs are only some of the alphabet-soup groups that have sprung up to provide medical services while, one hopes, reducing the cost of that care. Many physicians belong to more than one, and the number of these organizations will increase in the future. Capitation, shared liability, hospital purchase of individual and group practices, networking, outcomes-based standards, practice parameters and a host of others are in the mix of ideas being considered in the push to reduce health care costs.

Circumstances are at work to force

changes in the practice of medicine. Shared liability, where the physician is paid bonuses or incurs penalties based on the cost of services rendered, has the potential, based on monetary considerations, to rob the patient of quality care. This is a departure from the ideal that the physician is the patient's advocate in seeking the patient's best interest, regardless of the cost. Some

HMOs, PPOs, IPAs, PMAs, and MSOs are only some of the alphabet-soup groups that have sprung up to provide medical services while, one hopes, reducing the cost of that care.

members of large physician groups are told to order more tests, perform more procedures, or to see more patients per day in an effort to keep profits up. Insurance companies and HMO administrators are, in many instances, making medical decisions that should be made only by the physician.


The New England Journal of Medicine recently reported that U.S. Healthcare, a large HMO, spends only 74 percent of its revenues on medical care, while maintaining a \$1.2 billion cash reserve and paying its CEO \$20 million in salary and \$534 million in company stock. This is not an indictment of all managed care plans, but such information must make it seem to John Q. Public that all is not on the up-and-up in the health care industry.

Legislatures, both state and federal, are now in the business of setting health policy. The Kansas Legislature recently mandated a two-day hospital stay for normal deliveries. This is another example of a non-medical body making health care policy and affecting the cost of medical care without any medical knowledge. It seems entirely possible that more and more legislated health policy, based on emotion and not sound data, will be mandated in the future.

The nursing groups are touting themselves as a cost-effective means of increasing access to care and as patient advocates through case management. They are willing to collaborate with physicians and see themselves as especially valuable in underserved areas.

Has the public's opinion of doctors changed? Eavesdropping at non-medical gatherings (probably because all my

friends are now seeing doctors more and more), it is apparent that patients still want to have "their" doctor—the one who cares about them and their condition. They are not fond of seeing a different physician at every visit or of not being able to reach "their" doctor in time of emergency. Their sense of having an old-fashioned doctor is fast fading, and they feel betrayed. It would be hard for them to support the medical profession when they feel that the profession has forgotten, or worse, abandoned them for its own purposes. Perhaps patients are expecting too much, especially of the doctor's time; perhaps bureaucracy, insurance forms, hospital rules and regulations, etc., have made the doctor's life more difficult and demanded more and more of his or her time. Perhaps patients are more prone to sue without cause now than in the "good old days." Perhaps . . . perhaps.

There are many different forces working today to lower health care costs. What will eventually work will depend on the public's willingness to accept the proposed changes. At this time, no one can predict what the outcome will be. One thing seems certain: everyone wants to play doctor and claims to have the right answer. The last attempt at universal health care was defeated because patients still want to have "their" doctor take care of them. Medicine is the only entity that can give the right answer, but will the public be willing to recognize and support our ideas when some of the derogatory things they hear about doctors and the profession ring true? W.E.M. 

It is apparent that patients still want to have "their" doctor—the one who cares about them and their condition.

Biodegradable implants in hand and wrist fracture management

Rafael J Fernandez, MD & George L Lucas, MD



ALTHOUGH IT IS WELL KNOWN THAT A FRACTURE WILL USUALLY HEAL DESPITE THE treatment method chosen, not all heal with acceptable functional results. The importance of limiting residual deformities and maintaining joint motion associated with fractures is paramount in hand injuries. Fracture management involves both art and science in order to realign the bony fragments, restore stability, and most importantly, care for the injured soft tissues.

Whether a fracture heals by primary or secondary healing depends on the method of treatment chosen. Secondary fracture healing occurs through formation of biologic splint or “callus.” A callus originates from the hematoma at the fracture site, which ultimately calcifies and remodels according to Wolf’s Law. Primary fracture healing occurs through bridging of the fracture by cutting cones in the absence of a callus. Cutting cones are composed of a collection of bone resorbing osteoblasts followed by osteoblasts, producing osteoid. Primary fracture healing occurs in the presence of rigid fixation.

The science of fracture management has evolved with aid of technologic advances. Hippocrates, the father of medicine, treated fractures with bandages, oils, and simple wooden splints. Traction devices and plaster of paris increased the armamentarium available to physicians for closed management of fractures. Operative intervention in fracture management was attempted before the twentieth century, but complications were common due to infection, poor implant design, and ignorance of biomechanical principles. The Arbeitsgemeinschaft für Osteosynthese Fragen or The Association for the Study of Internal Fixation (ASIF), an international organization founded in Switzerland in 1958 by a group of physicians and engineers, works to reduce complications encountered in early operative fracture management. The principles laid down by this group have become the basis for modern fracture management and especially internal fixation.

The majority of hand fractures do not require operative management. Usually, closed manipulation with application of a splint or cast will lead to a successful outcome. Modern management of hand fractures, though, allows the physician numerous other treatment options.

Operative treatment of fractures provides an immediate internal splint applied directly to the surface of the bone, allowing earlier mobilization. Early mobilization decreases residual deformity, stiffness, and disuse osteopenia, which is especially important for maximum hand function.

Devices currently available for surgical management of fractures are manufactured from a variety of high grade metals and alloys, including surgical stainless steel, titanium, and cobalt. Miniaturization of previously bulky implants has expanded their use in the management of hand fractures. Advances in polymers have also allowed the development of implants which are radiolucent, and yet comparable in stability to metallic devices. Biodegradable implants are the next generation of devices designed for treatment of fractures, including those of the hand. Fixation devices available today vary in their rigidity, cost, degree of soft tissue disruption, and difficulty of application.

Metallic devices including wires, pins, plates, or screws, often require a second operation following fracture healing, in order to remove the device. Reasons for removal include: prevention of stress shielding, irritation of soft tissues, hardware breakage, and infection. The patient is exposed to additional risks associated with a second operation. The desire to eliminate such risk has spawned interest in the development of biodegradable implants.

In developing a biodegradable implant, many factors must be addressed. The material chosen and its breakdown products cannot be toxic, mutagenic, carcinogenic, or interfere with the biology of fracture healing. A biodegradable implant must not be rejected by the body's immune system. The implant must be sufficiently rigid to eliminate motion at the fracture, and of

an elastic modulus similar to bone, in order to prevent stress shielding. Breakdown of the implant should be through a biological reaction, and the rate should be inversely proportional to the rate of bony healing. Finally, the cost of the implant must be reasonable.¹

Biodegradable implants are made of copolymers such as lactide-glycolide and polyglycolide. These copolymers are broken down by hydrolysis.¹ Rods and pins made of these polymers have shown good results in fracture management. Drawbacks in the development of biodegradable plates include their thickness and the inability to contour the plate.¹ Biomechanical studies have also shown such implants to be sensitive to torsional forces, which limit development of screws made of these materials.

Despite biomechanical difficulties, initial trials using biodegradable implants have shown good results with low complications when matched to the current standard, i.e. metallic implants. The German section of ASIF has developed a biodegradable implant that has shown good results. Their studies have demonstrated no infections, long durability, and expected degradation in the treatment of osteochondral fractures.¹⁰ Hoffman et al treated forty distal radius fractures with biodegradable implants, again demonstrating good results at two years. Two cases of bacterial wound infection and nine patients that developed local inflammatory reactions, healed without further complications.⁵ In treating extra-articular fractures of the hand, Kumta et al showed no statistical difference between the use of polyglycolide implants or Kirschner wires.⁷

Application of biodegradable implants in ankle fractures has also demonstrated good results. Bostman compared biodegradable implants to

ASIF metal plates and screws for displaced malleolar fractures. No difference was observed between the two groups in their ability to participate in sports at one year.² Bucholz compared the use of 4.0 millimeter polylactide screws vs. 4.0 metallic screws in the treatment of medial malleolar fractures. This study demonstrated no significant difference in operative or postoperative complications. His study did not find late spontaneous drainage in any patient.⁴ Parks used biodegradable implants in podiatric surgery and found reactions only in patients over 40 years, and primarily in patients between 55-60 years of age.⁸

Fracture management is a dynamic field. Although biodegradable implants are in their infancy, early results are demonstrating favorable possibilities. Future research as is being done in the Orthopedic Research Laboratory of the University of Kansas School of Medicine-Wichita at St. Francis Regional Medical Center will hopefully develop new polymers and materials that are more bio-compatible. Such advances may reduce some of the difficulties described above, comparable to the evolution of operative treatment with metallic implants. **RJS**

Dr. George L Lucas is a professor and Chairman of the Section of Orthopedics, Department of Surgery, at the University of Kansas School of Medicine-Wichita. He is also the program director for the Orthopedic Residency Program. Dr. Rafael J Fernandez is a graduate of this program and is currently completing a sports medicine fellowship in Illinois.

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Vitamin D deficiency rickets in two breast-fed infants

FW Manfred Menking, MD



RECENTLY, WE ENCOUNTERED TWO breast-fed African-American children with florid vitamin D deficiency rickets. This report is intended to alert health care providers to proper prevention of this nutritional disorder.

Infant M.D. had been breast-fed to the age of 12 months. Due to a miscommunication, his pediatrician assumed feedings had been changed to commercial formula at four months and thus he received no vitamin supplements. Poor linear growth was noticed at an 11 month visit. At 14 months a fracture of the forearms was suspected because of swelling of both wrists. X-rays revealed advanced rickets with evidence of minor calcium deposition at the distal radial metaphyses. A complete skeletal survey confirmed the findings. (See Figure 1)

The mother reported that her son had received up to 16 ounces daily of 2 percent milk for the last two months. During the warmer season she had taken him out for walks in late afternoon and early evening hours. Following delivery she had not taken vitamins herself, but drank an estimated 20 ounces of milk daily.

Multiple serum chemistries were normal

except for a low phosphorus of 2.5 mg/dl and elevated alkaline phosphatase of 1440 u/L (normal range 40-300). The calcium was 8.9 mg/dl. There was generalized aminoaciduria. Serum 1,25-dihydroxy vit. D (calcitriol) was reported as 70.5 pg/ml (normal range 18.0-62.0).

Infant T.C. was breast-fed without formula supplements. At seven months his head appeared disproportionately large (90th percentile), the anterior fontanelle measured 4x4 cm, and he had stopped growing. At eight months his length of 64 cm was 2.5 cm below the fifth percentile, his weight of 7.5 kg corresponded to the 10th percentile. A rachitic rosary was palpable. Serum chemistries showed a calcium of 7.9 mg/dl, phosphorus of 2.4 mg/dl, alkaline phosphatase of 1040 u/L but no other abnormalities. He was referred for treatment of rickets which was clearly apparent on X-rays. His mother had not taken vitamins post-delivery and consumed less than 2 cups of milk per day. She admitted that she had administered vitamins (400 units of vit. D/ml) prescribed for her infant at four weeks of age, irregularly, perhaps three times per week. Serum 25-hydroxy vit. D (calcidiol)



Figure 1. Patient M.D. Marked flaring and poor calcium deposition in metaphyses, particularly striking in the distal tibia. Note the great distance between metaphyses and epiphyses of the knee compared to Figure 2.



Figure 2. Patient M.D. Complete healing of rickets, but persistent bowing of the lower tibia one year after treatment.

was low with 9 ng/ml, calcitriol was 130 pg/ml, above the normal range.

Both infants were admitted for 24 hours and received a total of 600,000 units of Ergocalciferol (vit. D2) in six doses at intervals of two hours and calcium lactate by mouth. Serum calcium rose to the normal range within 24 hours, the serum phosphorus completely normalized within one month, while the alkaline phosphatase declined to normal more gradually. Marked calcium deposition in the metaphyses was apparent on follow-up X-rays one month after treatment with complete healing of rickets but persistent bowing of the lower tibia (patient M.D.) one year later. (See Figure 2)

There have been repeated debates about the need for vitamin D supplements for breast-fed infants. Greer and Marshall¹ found no evidence of vitamin D deficiency in almost exclusively caucasian, six-month old breast-fed infants in Madison, WI, raised without vitamin D supplements. Nevertheless, multiple reports of deficiency rickets in totally breast-fed infants have been published in this and other countries. Manifestations usually present towards the end of the first year of life. A common feature of all case reports is the lack of adequate exposure to sunshine. Human milk has low levels of vitamin D². Finnish investigators³ determined that lactating mothers need a daily intake of 2000 units of vitamin D to achieve concentrations in their 15-week old infants approaching those with direct administration of 400 units to their babies. Harrison and Harrison² summarized the extensive research findings accumulated during this century stating that the natural source of vitamin D for infants is derived from

ultraviolet light-induced conversion of 7-dehydro-cholesterol rather than from breast milk.

We treated our rachitic infants with fractions of 100,000 units of vitamin D for a total of 600,000 units administered over 12 hours. This so-called "stoss" therapy (from German: to push) commonly used in Europe and elsewhere and advocated by Harrison and Harrison² as well as recently by Shah and Finberg⁴ helps to differentiate deficiency from vitamin D resistant forms of rickets. It will result in prompt improvement of the abnormally low serum phosphorus (a consequence of compensatory

hyperparathyroidism) and rapid X-ray evidence of metaphyseal calcium deposition. Hypocalcemia seen in deficiency rickets reflects refractoriness of bone to parathormone in the absence of vitamin D.

When combined with generous oral calcium administration, stoss therapy will prevent rachitic tetany commonly seen in the early phase of treatment with small doses of vitamin D. Indeed, the calcium levels of our patients had risen to 9.5 (Patient M.D.) And 10.5 mg/dl (Patient T.C.) in less than 18 hours, without subsequent hypercalcemia. Stoss therapy ensures adequate calcidiol levels for about three months⁵.

The serum concentration of 25-hydroxy-D was below the normal range in infant T.C. It is a sensitive index of vitamin D nutritional status. The laboratory failed to supply this metabolite for infant M.D. 1,25-dihydroxy-D was elevated in both infants due to secondary hyperparathyroidism as described in other case reports.

Breast feeding mothers should be reminded to properly protect their infants against this deficiency.

With mothers quickly rejoining the work force prolonged breast-feeding is not very common in our society. In the United States all infant formulas and milk are fortified with vitamin D. Thus, overt rickets is rarely diagnosed and there may be little familiarity with its manifestations. In patient M.D., rickets was

VITAMIN D DEFICIENCY RICKETS IN TWO BREAST-FED INFANTS

Continued from page 11

a chance finding since he was treated because of a burn and accidentally found to have swollen wrists. Thus, the disorder may remain unrecognized in some infants and toddlers.

Formerly rickets was most prevalent during winter months. Under present living conditions, dark skinned children in particular may not receive sufficient sun exposure even in the warmer seasons. Breast feeding mothers should be reminded to properly protect their infants against this deficiency. ~~RMS~~

Dr. FW Manfred Menking practices pediatrics and pediatric endocrinology at the Wichita Clinic. He would like to thank Drs. Leonard Sullivan and Susan Menking for the referral of their respective patients.

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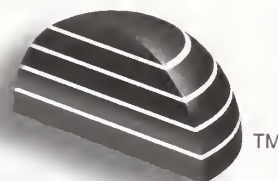
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Lipid screening and treatment by cardiologists have not improved

David G Meyers, MD & Brad T Steinle, MEd, MD

ABSTRACT

MUCH EFFORT BY THE NATIONAL CHOLESTEROL EDUCATION PROGRAM (NCEP) AND others has been made to induce physicians to screen for and treat lipid abnormalities in patients with coronary heart disease. We measured the effect of these efforts in a single group of cardiovascular specialists. We reviewed 20 percent of applicable patient records from 1987, 1989, and 1994 was performed to identify documented screening (cholesterol levels or lipid profiles) and treatment over 12 months after an index admission for coronary heart disease, along with a survey of physician acquaintance with NCEP guidelines, among the eight cardiovascular physicians. In the 160 patients with angina pectoris or myocardial infarction, total cholesterol levels were determined in 77-95 percent and lipid profiles determined in 2-11 percent. Treatment for cholesterol, greater than 150 mg/dl was initiated in 14-32 percent. These rates did not significantly improve over the study period. Yet, all the physicians were acquainted with the NCEP and five of the eight perceived their screening and treatment to be more aggressive in 1994 than 1987. Lipid screening and treatment by cardiovascular specialists have not improved despite copious supportive literature. Barriers other than lack of knowledge may impede implementation of this effective therapy.

While primary care physicians and the general public have recently begun to recognize the importance of lipid screening and treatment¹, cardiologists have been more resistant to lipid management. A chart review performed in Ontario from 1983 to 1985 found that only 18 percent of patients admitted for coronary artery disease had lipid profiles ordered and 11 percent received diet prescriptions². In New York City between 1988 and 1989, Cohen and associates³ performed lipid profiles on patients admitted for coronary angiography and found that only 17 percent of those patients with elevated serum cholesterol were subsequently further evaluated or treated for lipid abnormalities by their attending cardiologists. Through dissemination of educational materials and guidelines, at a cost of \$1.5 million per year, the NCEP has attempted to improve public and physician awareness of the importance of lipid screening and treatment. In

1988, published guidelines, the Adult Treatment Panel (ATP-I)⁴, emphasizing primary prevention were mailed to 150,000 physicians. In 1993, updated guidelines emphasizing secondary prevention were published (ATP-II)⁵.

SUBJECTS AND METHODS

We performed a chart audit for the years 1987, 1989 and 1994 to determine the impact of the NCEP (and other publications) on cardiovascular specialists' screening and treatment rates. A stable seven man, one woman, urban hospital-based group of board-certified cardiovascular physicians (age=46±11 years) {part of a large multi-specialty group} allowed a single abstractor to review every fifth chart by chronological order of discharge from 1987, 1989 and January-July 1994 with a principle diagnosis of angina pectoris (ICD-9 code 413.9) or myocardial infarction (ICD-9 code 410.11-410.91). No attempt was made to confirm the diagnoses. The index admission and all records for both inpatients and outpatient visits plus laboratory results from the multi-specialty practice which utilized a unified medical records systems for the subsequent 12 months, were reviewed for evidence of screening and treatment. Screening was defined as a laboratory report of plasma cholesterol determination or as a lipid profile (measured total cholesterol, high density lipoprotein cholesterol and triglycerides with calculated low density lipoprotein.) Treatment was defined as documentation in notes or orders of a low-fat diet prescription, referral to a dietitian or prescription of a lipid modifying drug. Most patients subsequently were seen at least once as outpatients by the cardiovascular group (92 percent) and nearly all the rest were followed within the larger multi-specialty group (four percent). Only six patients received no recorded follow-up. The number of deaths subsequent to the index admission was not determined.

The eight physicians were given a written questionnaire eliciting their acquaintance with NCEP guidelines, thresholds and goals for treatment,^{4,5} and self-perceived changes in attitudes toward lipid-screening and therapy from 1987 to 1994. Data analysis used ANOVA and Fisher's exact test with the alpha significance level set at <0.05, 2-tailed.

TABLE 1: PATIENT CHARACTERISTICS

	1987	1989	1994	p-value
n	56	60	44	
Age (yrs)	50±11	58±14	63±14	NS
Male	37	44	32	NS
Female	19	16	12	
White	47	51	37	NS
Black	7	7	6	
Hispanic	2	2	1	
Stable angina	30	35	21	NS
Unstable angina	6	2	3	
Q-wave MI	15	18	13	
non Q-wave MI	5	5	7	
Total cholesterol	204±44	218±46	206±43	NS

Note: age and total cholesterol given as mean±standard deviation

RESULTS

No significant differences in patient characteristics or distribution of diagnoses were noted among the years surveyed (Table 1). Plasma total cholesterol, as part of a chemistry profile, was frequently obtained, but lipid profiles were rarely ordered (Table 2). No lipid profiles were obtained at subsequent visits in patients not having a profile at the index visit. Frequencies of obtaining either test did not change across the surveyed years. Among patients in whom total cholesterol was determined, 50 percent had levels above the ATP-I⁴ treatment goal of 200 mg percent and more than 90 percent had levels above the ATP-II⁵ treatment goal of 150 mg percent (Table 3). Table 3 also demonstrates a doubling in lipid modifying treatment between 1987 and 1994. Yet, about two-thirds of patients were not treated with diet or drugs as recommended by the NCEP guidelines appropriate to the year that the patient was screened. This pattern of performance did not significantly improve across the surveyed years. Results of the lipid profiles obtained evoked no treatment from the attending physicians.

The questionnaire suggested that all eight physicians were acquainted with NCEP ATP-I⁴ and six knew the APT-II⁵ guidelines. Five perceived themselves as currently more aggressive regarding lipids, two were unchanged, and one was less aggressive than in 1987. In 1994, the mean level of total cholesterol for which these physicians believed at least dietary treatment to be required was 195 mg percent (range=180-240

LIPID SCREENING

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mg percent) and the goal of treatment in their patients with coronary artery disease was 175 percent (range=150-200 mg percent).

COMMENT

Our data shows that cardiovascular specialists continue not to consistently screen and treat lipids, even after numerous supportive published reports and the efforts of the NCEP. Indeed, the current results are remarkably similar to results obtained before the NCEP reports.² Recently, screening rates of 53-56 percent have been reported by similar surveys.^{6,7} While some improvement was observed, it is apparent that rates of screening and treatment are less than the rates implicit in the NCEP guidelines. Because lipoprotein fractions were seldom obtained in the current study, it was necessary to phrase all cut point questions in terms of total cholesterol instead of low density lipoprotein.

It is possible that the limited statistical power of our sample (approximate n=50 in each year sampled) failed to detect improved screening and treatment. The rates are based solely on performance documented in the medical records. While virtually all patients obtained follow-up within the large multi-specialty practice, some may have obtained screening and treatment elsewhere, or which was not documented in available records. The small number of cardiovascular physicians studied and the fact that they were in a single practice group may limit the implications of our findings.

Failure of the NCEP to make cardiovascular physicians aware of its recommendations is not the problem. Physicians appear to be acquainted with the NCEP,^{4,5} although some have not acquired a working knowledge of the specific guidelines or do not fully agree with their validity.⁷ Lipid screening and treatment among primary-care physicians have recently improved.¹ Why then have cardiovascular specialists in particular not broadened and intensified their lipid management? While some have argued that physician education and consensus-based guidelines are ineffective in modifying physician practice behaviors,⁹ it is not apparent why guidelines would be followed by primary-care physicians, but not by cardiovascular specialists. Several barriers to compliance—some unique to subspecialists—have been suggested.^{10,11} These include lack of time, lack of interest in risk factors, inadequate reimbursement, limited access to treatment resources, limited skills with diet and drug prescription, lack of confidence in diet counseling, limited self-efficacy, and a belief that risk factor modification is the responsibility of primary-care physicians.^{3,10,11}

Because lipid screening and treatment have not improved in spite of general dissemination of information, targeted education and physician-independent practices such as computer-assisted screening, critical pathways, and case managers might become desirable. **MS**

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TABLE 2: FREQUENCY OF LIPID SCREENINGS

	1987	1989	1994	P-value
n	56	60	44	
Total cholesterol	46 (87%)	57 (95%)	34 (77%)	NS
Lipid profile	1 (2%)	5 (8%)	5 (11%)	NS

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TABLE 3: PREVALENCE OF LIPID ABNORMALITIES AND FREQUENCY OF LIPID TREATMENT

Threshold	1987	1989	1994	P-value
Patients with total cholesterol > 200 mg/dl				
n	25	37	19	NS
(% prevalence)	(54%)	(65%)	(56%)	
Diet treated	825	15	29	NS
(%)	(32%)	(68%)	(78%)	
Drug treated	0	2	8	NS
(%)	(0%)	(5%)	(43%)	
Patients with total cholesterol > 150mg/dl				
n	42	54	31	NS
(% prevalence)	(91%)	(95%)	(91%)	
Diet treated	14	32	21	NS
(%)	(33%)	(59%)	(67%)	
Drug treated	0	2	4	NS
(%)	(0%)	(4%)	(13%)	
Patients with LDL >130 mg./dl				
n	1	4	3	NS
(% prevalence)	(100%)	(80%)	(60%)	
Drug treated	0	0	0	NS
(%)	(0%)	(0%)	(0%)	
Patients with LDL >100 mg/dl				
n	1	4	4	NS
(% prevalence)	(100%)	(20%)	(80%)	
Drug treated	0	0	0	
(%)	(0%)	(0%)	(0%)	
Patients with HDL < 35 mg/dl				
n	1	1	4	NS
(% prevalence)	(100%)	(20%)	(80%)	
Drug treated	0	0	0	NS
(%)	(0%)	(0%)	(0%)	


Note: HDL=high density lipoprotein;
LDL= low density lipoprotein

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Heredity and systemic lupus erythematosus: dissecting a complex genetic disease

Timothy S Shaver, MD; John B Harley, MD; & Kathy L Moser, PhD

INTRODUCTION



THE SEARCH FOR CAUSES OF SYSTEMIC autoimmune diseases has proven to be challenging and often frustrating for clinicians and scientists over the past several decades. Few of these disorders have garnered as much attention as systemic lupus erythematosus (SLE). This condition has likely generated substantial interest not only because SLE is common, with a prevalence of one in 2,000 from European-derived populations¹, but also because peak incidence rates are often reported in women during child-bearing years², thus profoundly affecting quality, and often duration, of life.

While the pathogenesis of SLE has remained elusive, there is substantial evidence that genetic factors play a significant role. The prevalence of SLE in first and second degree relatives of SLE patients has been reported as 7-12 percent³⁻⁵, an approximate 200-fold increase relative to European-American populations. Twin studies much more convincingly suggest a genetic etiology. Whereas 2-5 percent of dizygotic twins and nontwin siblings are concordant for SLE,

disease concordance rates in monozygotic twins have ranged from 14-69 percent⁶⁻⁸.

Despite the evidence cited above, a precise genetic mechanism leading to development of SLE remains to be elucidated. This article will review existing evidence for genetic transmission for autoimmunity, in general, and SLE in particular. We will also discuss candidate genes for SLE, as well as exploring principles and difficulties inherent in genetic linkage pertinent to the study of complex hereditary diseases such as SLE.

PRINCIPLES OF GENETIC RESEARCH

Before we can begin a meaningful discussion of potential genetic mechanisms underlying the pathogenesis of SLE, we must first review the principles fundamental to the study of heritable diseases. Conditions such as Huntington's chorea, cystic fibrosis, polycystic kidney disease, and neurofibromatosis, which appear to follow a simply Mendelian mode of inheritance lend themselves most easily to genetic investigation. The mode of transmission of these diseases is readily inferred by direct observation of the pattern of

affected members within families and by application of simple statistical tests. Beginning with these observations, researchers have applied sophisticated modern methods of analysis, subsequently leading to localization of the genetic mutation responsible for cystic fibrosis to chromosome 79. This information will have a major impact on screening presymptomatic patients and developing new therapies. Similar advances in other genetic diseases are forthcoming and anticipated.

Unfortunately, additional variables appear to be operative in many heritable illnesses, confounding such analysis. First of all, certain diseases may be polygenic, requiring two or more genes in order to be expressed. Secondly, expression of a given genotype may be influenced, positively or negatively, by environmental or random (stochastic) factors. The influence of this variation is known as penetrance, and is expressed as the probability that the phenotype (or disease) will manifest, given a certain genotype. Finally, certain illnesses may

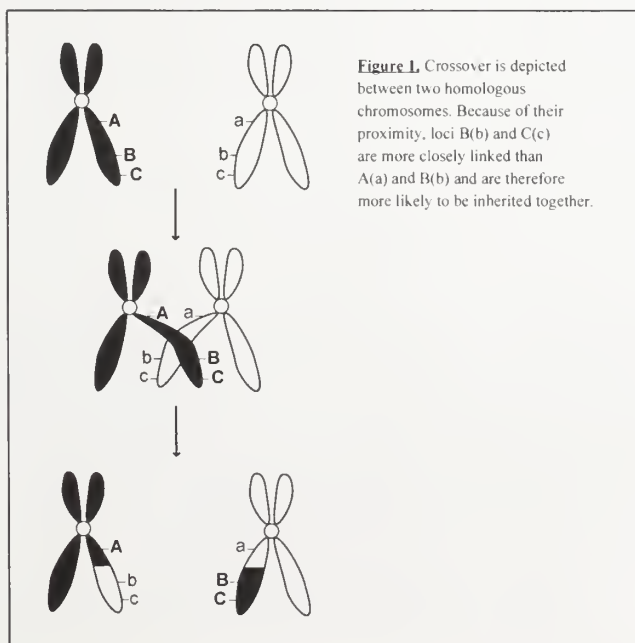
result from multiple potential disease-related loci not consistently shared among all families, a phenomenon known as genetic heterogeneity.

The effect of such confounding factors are found in a variety of complex genetic disorders. Colon cancer, for example, is associated with a mutation of the ras oncogene as well as deletions in chromosomes 5, 17, and 18.¹⁰⁻¹² The degree of interaction between such genetic alterations is unclear at present, but there are likely several ways susceptibility to colon cancer may be inherited (genetic heterogeneity). Interactions may be present between multiple alleles (a phenomenon known as epistasis or a gene dosage effect), in addition to environmental contributions (penetrance).

While associations between various diseases and certain genetic markers can be found when sampling sufficiently large populations, these findings only indirectly suggest that these markers actually confer disease susceptibility.

disease locus in the chromosomal region of interest. Once linkage is established to a chromosomal region, further studies can focus on identification of the exact gene and characterization of relevant mutations.

When performing linkage analysis, the relative distances between a disease locus and a marker locus can be estimated by utilizing the principle of genetic recombination, or crossover. This process is depicted in Figure 1. During meiosis, homologous chromosomes from the parents participate in an equal exchange of genetic material. The result of this exchange is reflected in the chromosomal composition of the offspring. The closer a genetic marker locus resides to the putative disease-related gene, the higher the likelihood they will be inherited together. The magnitude of this effect may be calculated as an odds ratio for the probability that the two loci are linked versus the probability that the loci segregate independently. The log of this odds ratio is known as the lod score, and when calculated at a given range of recombination fractions, an estimate of the genetic distance between the two loci can be made. At a maximum lod score, the probability is highest that the genetic marker resides at or very near the actual disease-related gene. A lod score of at least 3.0, or in some circumstances at least 5.0, is usually required to establish linkage. At these levels the possibility that the observed data occurred by chance is very small, approximately 1:1,000 and 1:100,000, respectively. Genetic markers utilized in linkage studies involve protein polymorphisms, restriction fragment length polymorphisms (RFLP) or polymerase chain reaction (PCR) analysis of short



Identification of inherited disease-related loci must be determined by linkage analysis. Linkage analysis differs from population studies in that families must be studied. Within such families, the tendency for a specific allele at a particular genetic "marker" locus to cosegregate with the disease in a family determines the extent to which this locus is linked to a potential

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tandem repeats (STR's). A full discussion of these procedures is beyond the scope of this article.

HOW IS SLE INHERITED?

The inheritance of SLE appears to be complex and not likely to be explained by a single-locus homogeneous simple Mendelian model, though individual examples of apparent autosomal dominant, autosomal recessive, and sex-linked transmission have been observed in isolated pedigrees.⁴ It has been calculated, based on differences in disease concordance rates between monozygotic and dizygotic twins, that four or more genes may be involved in conferring disease susceptibility.¹³ Whether these estimates may be attributable to genetic heterogeneity, epistasis, stochastic factors, or a combination of these variables is unclear.

Perhaps serologic abnormalities and autoimmune diseases in general are more directly heritable than SLE itself. Autoantibody profiles in monozygotic twins are remarkably similar, even when one twin is unaffected or fails to meet criteria for SLE.¹⁴ Various immunologic abnormalities such as hypergammaglobulinemia, rheumatoid factor, biologic false positive tests for syphilis, antinuclear antibodies, anti-RNA antibodies, and lymphocytotoxic antibodies have all been observed in increased frequency in family members of SLE patients when compared to control populations.¹⁵⁻¹⁷ Moreover, autoimmune diseases other than SLE, including rheumatoid arthritis, Sjogren's syndrome, immune thrombocytopenia and autoimmune thyroiditis have been found in 13 percent

of relatives of SLE patients.³

Such observations have led Bias and colleagues to postulate the existence of an "autoimmune phenotype."¹⁸⁻²⁰ The presence of any one of the following characteristics, which tend to segregate most closely within families with autoimmunity, define this phenotype:

- 1) presumed autoimmune disease,
- 2) positive antinuclear antibody (ANA),
- 3) positive anti-single stranded DNA,
- 4) biologic false positive for syphilis, and,
- 5) positive rheumatoid factor.

In the original pedigrees studies, this putative trait seemed to demonstrate autosomal dominant inheritance with an estimated penetrance of 92 percent in females and 49 percent in males. They proposed that other modifying genes such as those in the major histocompatibility complex (MHC or HLA) may confer specificity to the expression of autoimmunity in a given individual.¹⁸

We recently attempted to validate this model on a large extended pedigree containing eight members meeting criteria for SLE.²¹ Computer simulation studies disclosed a maximum lod score under a fully penetrant autosomal recessive model, contrasting with Bias' findings. This simulated maximum lod score for the autoimmune phenotype was, however, over two units (100-fold) higher than that obtained for SLE, which supports the notion that this proposed trait is more directly accessible to genetic analysis.^{18,20}

WHAT GENES ARE INVOLVED?

Despite the level of complexity inherent in defining genetic mechanisms involved in SLE, population-based studies and case reports provide several candidate genes which may direct formal genetic linkage studies. The most extensively studied loci among these reside within the MHC or HLA region on the short arm of chromosome 6. Certain Class II MHC antigens have been shown in increased frequency in patients with SLE, and particularly in association with specific serologic profiles.^{22,23} Among caucasians, HLA-DR3, by itself or in association with HLA-B8,²² is associated with an increased risk of developing SLE, particularly with older age at onset.²⁴ These MHC associations may be more tightly correlated with specific autoantibodies. Anti-Ro/SSA antibodies are strongly associated with HLA-DQ1/DQ2 heterozygotes,²⁵ particularly in relationship to T cell receptor beta polymorphisms.²⁶ Antibodies to La/SSB, on the other hand, are most closely associated with the HLA-B8, DR3 haplotype, while anti-nRNP antibodies are associated with HLA-DR4.²³

The presence of complement deficiency states has also been shown in increased frequency in SLE patients. Null alleles of C4A, residing within the MHC region, appear to be important genetic markers for SLE in both blacks and caucasians. While these alleles may be seen as part of an extended HLA-B8, DR3 haplotype, the association holds regardless of the presence of other HLA haplotypes, suggesting that C4A null alleles may be the primary factor in conferring increased susceptibility to

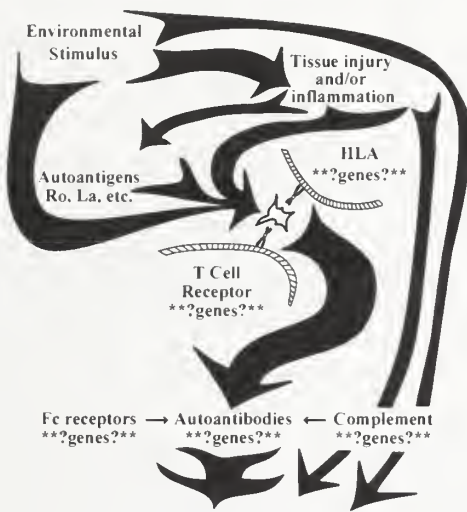


Figure 2. Model for lupus pathogenesis. The environmental stimulus leads to tissue infection or injury. Eventually lupus autoantigens become involved in an immune response that is dependent upon histocompatibility alleles and T-cell receptors. Both of these cell-surface molecules are highly polymorphic. The autoantibodies generated and their consequences can be modulated by Fc receptors and complement components. Each of the molecules with a suspected pathogenic or etiologic role is indicated by ***?genes?***. Used by permission from Harley, et. al. 1994¹³.

SLE.^{22,27,28} While less well described, SLE and lupus-like disease has also been shown to occur with increased frequency in the setting of C2 deficiency.²⁹ This may especially hold true when anti-Ro/SSA antibodies are present.³⁰

Genetic loci residing outside the MHC region aren't well studied, but may prove to be valuable candidate genes for SLE. Deletions in the gene encoding the Fcgamma R III receptor on neutrophils, which is involved in the clearance of circulating immune complexes, have been described in SLE patients.^{31,32} Moreover, there has been a trend toward genetic linkage of the Fcgamma R III receptor with SLE observed in multiplex black families in preliminary studies³³. Finally, several immunoglobulin gene Gm allotypes (markers of IgG heavy chains) are associated with SLE in black patients,³⁴ and abnormal interleukin-2 activity have been observed in family members of SLE patients, potentially attributable to either genetic abnormalities or environmental effects.³⁵ While all of the above associations are compelling and suggest a participatory role for particular loci in the genetics of SLE as well as focusing future investigation by more sophisticated methods, the only definitive way to prove an etiologic role of these genes is through formal genetic linkage studies.

OTHER FACTORS IN THE DEVELOPMENT OF SLE

Despite considerable evidence for a genetic etiology, environmental factors also appear to play a significant role in the pathogenesis of SLE. First of all, while disease concordance rates in monozygotic twins are high, they are far short of 100 percent, consistent with existence of a significant environmental contribution.⁶⁻⁸ Moreover, disease onset in siblings occurs more closely together in time than in chronologic age³⁶, possibly implicating a common environmental exposure. Furthermore, pet dogs of SLE patients³⁷ as well as laboratory workers handling SLE sera³⁸ have been noted to possess various autoantibodies.

Perhaps more convincing evidence can be found by examining serologic data from nonconsanguineous relatives in SLE pedigrees. Cleland, for example, found ANA positivity in 52.9 percent of consanguineous relatives of SLE patients as well as 56.5 percent of nonconsanguineous relatives who were household contacts.³⁹ In an SLE pedigree we collected, all members were evaluated for the presence of the autoimmune trait (previously described by Bias and colleagues). Surprisingly, 50 percent of

nonconsanguineous relatives met criteria for the autoimmune phenotype, compared with 12.5 percent of matched laboratory controls ($p < 0.05$). We also pooled 19 nonconsanguineous relatives from 15 additional pedigrees and found that a similar percentage (47.3 percent) had features of the autoimmune phenotype, suggesting that this feature may be common to many families multiplex for SLE.²¹

What environmental factors may be involved? Epidemiologic, laboratory and clinical data reveal several possibilities. Infectious agents such as parvovirus,⁴⁰ type C retroviruses,⁴¹ and vesicular stomatitis virus⁴² have been implicated as well as aniline hair dyes⁴³ and L-canavanine, a nonprotein amino acid found in alfalfa sprouts causing SLE-like disease in non-human primates⁴⁴. Direct evidence for any of these agents in the pathogenesis of SLE is, however, far from conclusive.

The additional influence of gender and hormonal status adds another level of complexity to the study of SLE. The importance of these factors is seen most clearly in the 9:1 female to male ratio of disease prevalence.⁴⁵ This is further underscored by the observation that female predominance for SLE is less pronounced prior to menarche and after

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menopause, peaking during active childbearing years.⁴⁶ The diminished penetrance of the autoimmune phenotype in males (49 percent) compared to that observed in females (92 percent) adds additional support to an influence of gonadal hormones.¹⁸ Direct evidence of hormonal effects can be seen in murine models for SLE, in which estrogens appear to accelerate the course of experimentally induced nephritis, while androgens attenuate disease severity.⁴⁷⁻⁴⁸ Moreover, Lahita has described abnormalities in both estrogen⁴⁹ and testosterone⁵⁰ metabolism in female SLE patients. It appears, then, that gonadal hormones play a modulatory role in the development or maintainance of autoimmunity and/or SLE, but are not likely to play a direct role in pathogenesis.

SUMMARY

The etiology of SLE appears to be exceedingly complex and possibly heterogeneous, with genetics and environment both making substantial contributions. A schematic representation of potential mechanisms is depicted in Figure 2. We may not fully understand the pathogenesis of this disease until we unravel the relative contributions of each component to the development of SLE. While genetic mechanisms involved in SLE remain obscure, we now have available elegant laboratory techniques for analysis of genetic loci as well as computer technology which permits simulation and analysis of the transmission of complex genetic traits among multiple families and demographic groups. What remains is the painstaking task of collecting families multiplex for SLE and analyzing multiple sets of clinical, serologic, and

genetic data within and between these pedigrees. Such studies are currently underway and will hopefully increase understanding of this enigmatic and complex autoimmune disorder. **MS**

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Doctor Fabrique

D Cramer Reed, MD

I AM AWARE THAT THERE ARE THOSE AMONG you who insist that Dr. Fabrique and I were contemporaneous. I am here to refute that rumor. Actually, I'm five years older.

Andrew Hinsdale Fabrique was born in Harrison County, Indiana, September 9, 1842, the ninth of 10 children, eight of whom survived to adulthood.

His parents, both born in Vermont, were descendants of the old French Huguenots. His father died when Andrew was seven, leaving his mother to raise 10 children alone.

At 16, after spending some time in Centre College, he taught school, often staying just a few pages ahead of his students. When arithmetic problems were too tough, he'd walk 10 miles to the home of a minister for help with the solutions.

Because of his French name, he was offered an opportunity in New Orleans with a Dr. Piquet, who also operated a drugstore. It was he who added much to young Andrew's social and cultural development by insisting that he read good literature and attend the opera on his free nights. Here, too, he was able to attend medical lectures at Tulane.

When the Civil War broke out, he joined Company A, 12th Indiana Infantry. Acquaintances described him as being in prime physical condition, "of fair complexion, brown hair, large nose and ears, sparkling blue eyes, nineteen years old, weighing 160 pounds, and 6 feet 4 inches tall...he had all the requirements of a good soldier," which he proved to be. In 1862, at Shiloh, his left arm was shattered at the elbow. Amputation was strongly advised and just as strongly rejected. He was able to regain good use of his fingers and hand and returned to active duty three months later.

The following year he was wounded a second time, and in July, 1865, was mustered out of the service with the rank of major.

It is interesting to know that he did not accept a pension until he was past 70 and retired from practice. He felt that by that time the other soldiers had been paid their share, making his pension justifiable.

After the war Andrew moved to Aurora, Illinois, and married Sarah Philler. They had one child, Mattie Lee. During his three years there, and while successfully operating a drug store, he attended lectures at Rush Medical College, made calls and filled prescriptions for an older physician.

In 1869, following a fire which destroyed the drugstore, the Fabrique family moved to Topeka. Shortly thereafter, Dr. Fabrique set out in a covered wagon to explore El Dorado, Augusta, Wichita, and Arkansas City to determine where he wanted to hang out his shingle. He settled on Wichita "... because from a rise called Fairmount, I could see this wonderful valley of the Arkansas River stretching away to the Northwest as far as the eye could see." He never wavered from his enthusiasm for the area.

When Andrew Hinsdale Fabrique arrived in 1869, Wichita was just a tiny village. This contemporary of Wyatt Earp lived to see it become the state's largest city. In the early 1870s, his practice, like that of his compatriots, carried him east to the Walnut River, North to Newton, South to Indian territory, and "west as far as one could ride in two days." By the end of the 70s, the pioneer period of Kansas medicine was passing, and the country doctor began to give way to the town doctor. Crumrine called him a link between the old and the new.

Upon his arrival here, he selected a parcel of land at the NW corner of Central and Lawrence (now Broadway) and began construction of an 18' by 30' two-room house for his family. Now and then he would add on another room—no architectural plan—just wherever the carpenter thought it would be easiest. Some of his friends claimed he built on when he had a good fracture case or had been lucky at poker. He did not deny the rumor.

The fees which Fabrique and his contemporaries charged were modest and geared to the patient's ability to pay. Hard cash was in short supply. He never accepted payment from pensioners, working girls or poor widows or orphans. He believed that it was impossible for a man to be a good physician and a financier at the same time.

Victor Murdock, famous editor and friend, wrote that in his office the old doctor stored his bills receivable. Once in a

When Andrew Hinsdale Fabrique arrived in 1869, Wichita was just a tiny village. This contemporary of Wyatt Earp lived to see it become the state's largest city.

DR. FABRIQUE

Continued from page 23

while he would fan them across his thumb like a deck of cards. Some might be presented for payment, but many were never sent.

The average charge for a house call during the day was about \$1.50; though some doctors charged \$2. Obstetrician cases and tonsillectomies were \$15.00.

Much of Dr. Fabrique's medical work in the early days was in obstetrics. In 1887, he and Dr. James Oldham formed a partnership to establish a hospital. They rented a house on North 4th Street with \$50 of borrowed money.

Even working exceedingly long hours, the venture wasn't financially successful. The hospital was closed in 1889. Later in the same year Bishop Hennesy contacted Sisters of the Sorrowful Mother who reopened the hospital, naming it St. Francis. Dr. Fabrique thus entered into a long association with the enterprise and started the first intern program in obstetrics, which he personally supervised until his retirement in 1911. The term "Fab's Boys" originated with his dedication to the graduate medical education program. It was several of these devoted, young physicians who in 1905 contacted Northwestern University and arranged to have a regular medical degree conferred on him at age 63.

Several unsuccessful attempts to found medical schools had taken place in Kansas. One final interesting, though abortive attempt, began in Wichita in 1889. Andy Fabrique and 17 of his colleagues bought shares of the Wichita Medical College which succeeded in opening its doors for 2 four-month terms. Here, too, the would-be educators were plagued by the shortage of anatomical material and clinical facilities; in addition the benches of students were not overflowing.

In spite of a very active practice, Dr. Fabrique was very civic minded. Howard Clark described him as, "... a pillar and builder of Wichita from the time it was a village until it became a full-grown city." He served on the first city council (known as the pioneer civilization administration); was instrumental in bringing the Santa Fe Railroad from Newton; getting the "cattle trade" for Wichita; on the committee for the first public library; president of the local school board; plus a number of other community activities. He convinced William Greiffenstein to serve as mayor and the two men formed a local syndicate which issued bonds to build Turner Hall at First and Market where the literary society met, school plays were performed, as

well as with vaudeville and opera. He and Dr. Charles Furley organized the South Kansas Medical Society which functioned until 1903 when the MSSC was formed.

At the same time, he was friendly with most of the other city physicians. It is written that Fab was especially fond of Drs. Bowers, Martin Hagan, JD Clark, DI Maggard, and Fred Lyons.

In his "History of the Sedgwick County Medical Society," Dr. Clark wrote, "It is high time that everyone becomes better acquainted with the man who has been mentioned so freely as 'Fab'. There is no doubt that he blazed the trail for modern medicine in Wichita—in fact, the state of Kansas—and did more than any man of his time to bring good medicine to his state."

Dr. Fabrique performed his last surgery at age 74 without the aid of glasses. He died when he was in his 86th year, greatly admired in the community and generally recognized as a "doctor's doctor." **MS**

Dr. D Cramer Reed is the Vice President of Senior Initiatives at the Wesley Medical Center in Wichita.

Life after Medical School

Warren E Meyer, MD

Leonard Laster, MD; W W Norton & Company; hard cover, 344 pages, \$27.50

THIS BOOK CONSISTS OF INTERVIEWS WITH 32 doctors who describe the factors that brought them into medicine, influenced their choice of specialty, lead some of them to career changes in addition to or after practice, and some of their ideas about the future of medicine and the reform of the health care system.

The book is divided into five parts entitled "The Basic Cut," "Generalist or Specialist," "Which Person for Which Path," "National Health Policy," and "Confronting Obstacles and Setbacks."

"Basic Cuts" deals with medicine, surgery, psychiatry, anesthesiology, pathology, radiology and curiously, the corporate CEO and the foundation president.

The "Generalist or Specialist" section deals with a variety of specialty fields from general medicine to clinical research and fairly represents those areas of clinical practice detailing the doctor's choice of each and giving a taste for what they do.

Part three is entitled, "Which Person for Which Path," in which training program directors in the residencies of medicine, surgery, psychiatry, and

pediatrics discuss their role in trying to be sure the round peg fits into the round hole and what happens when it doesn't.

The fourth section deals with national health policy and physicians participating in the debate from viewpoints and positions different from their medical background. One is the governor of a state, another the editor of a major medical journal, and the former Surgeon General, Joycelyn Elders. Her introduction contains the statement, "The interview for this chapter was done just as she (Elders) was getting ready to leave Arkansas for Washington. The subsequent course of events has received enough attention in the media to warrant no further comment here."

The last part deals with confronting the obstacles and setbacks of racial prejudice, malpractice litigation, and personal illness as experienced and articulated by three physicians who had to deal with these problems and how it effected them and their practice.

There is both a Prelude and a "What's Next?" part to the book. Both need to be read to get the flavor and intent of the author. This would be a good book for someone interested in becoming a doctor because the pathways chosen by the doctors are very different and serve to show that there is no one right pattern for medicine. It is a very diverse group in intellectual pursuit, talents, individual interest, and personality. They all agree that medicine is a fascinating profession that allows much freedom to choose at all levels of life and never ceases to stimulate the mind and imagination.

This reviewer would have liked to have seen it noted, that more doctors in private practice are being included in the work. The preponderance (about 65 percent) of the interviews were of members of the faculty of the University of

Massachusetts Medical Center and represented the sentiments of the East coast as to the future of health care. The West coast had some representation, but the Midwest had almost none. More input from the private sector of medicine would have given a broader and hopefully a fairer picture

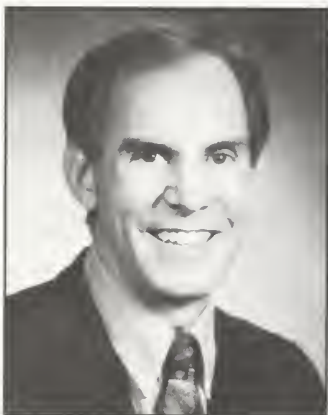
The book is helpful for the individual who is contemplating a career in medicine to show that there is more than one way to "skin the cat" in the search to become a physician.

of what the practice of medicine entails. A broader scope of opinion from around the country could have better served the reader and given another flavor to the whole subject of medical care.

Still the book is helpful for the individual who is contemplating a career in medicine to show that there is more than one way to "skin the cat" in the search to become a physician. If it serves to make one more person secure in his or her resolve to pursue medicine as a career or if it prevents another from making a "mistake," then it has served a useful purpose. **KMS**

Managed care: it's been around a long time and it's not going away

David K Ross, MD
KMS Immediate Past President



Editor's note: Due to recent sporadic production of the Journal, Dr. Ross' Presidential Message was not published during his term in office. Instead, it is printed here with our sincerest apologies for the delay.

FOR MANY YEARS AT OUR LOCAL HOSPITAL medical meeting, every time we had a discussion about peer review, utilization review, anything else of a similar nature, we could always count on one of our elderly staff members, who began practice before I was born, to eventually stand up and make the comment, "fellows, we are never going to get away from all this until we get back to the old doctor-patient relationship." What I always assumed he was referring to was a return to the days when the patient went to the doctor, received services, and then paid the doctor directly out of their own pocket without the intervention of an insurance company or any other type of third party payer.

Frankly, returning to that situation never seemed very appealing to me since it would undoubtedly result in an immediate and substantial decline in my standard of living. Not only would my income drop but my effectiveness as a physician would be

diminished considerably. Many of the tests that I order would be a severe economic burden for most of my patients. More expensive things like CT's or MRI's would cause extreme hardship; routine surgeries would be looked on as a financial disaster; and, some of the real major miracles that we perform like joint replacement and cardiac surgery, would be totally out of reach for the general public.

In retrospect, the original doctor-patient relationship was probably managed care at its finest. Physicians were reimbursed on a fee-for-service basis, but they certainly had an incentive not to do services above and beyond what patients could pay since they would take the loss. Moreover that system had something that even the most sophisticated managed care systems now in existence still have failed to achieve in that the patients themselves had a direct and immediate interest in managing health care costs.

The elderly physician I mentioned is no longer around the Ark City Hospital staff and none of us have taken up his torch to continue to call for a return to the "good old days." We realize that health care is very important and,

by its nature, it is the type of service that people, by some vehicle, need to set money aside for. The need for medical care is the "rainy day" that people should, but often do not, save money for. I believe the recognition of this fact was what in the beginning led people down the pathway of health insurance.

Unfortunately, as things progressed, significant mistakes were made. Everyone would be entitled to their own opinion about what caused things to go wrong, but I think many of our problems began with the battle cry "health care is a right." This is a belief that came out of the late 60s, advanced by those who felt that we could and should treat health care like life, liberty and the pursuit of happiness. This idea completely ignored the fact that even then, and certainly now, we have learned how to do more for people than we could afford to do. The vision was that somehow health care should be "free" for everyone since it was something everyone needed. In retrospect this was of course tantamount to saying that since something is necessary it should be available without limitation to everyone. What happened was of course the same thing that would have happened had we said that since food is necessary for everyone we would set up the following system. All those who could afford it would pay for food insurance in advance and those who couldn't afford insurance would have it paid for them. Then everyone would just go to the grocery store whenever they wanted and get whatever they wanted. Had we done that of course all the steak and lobster would have disappeared immediately, and it wouldn't have been too long before even the broccoli was in short supply.

By the time I came into practice in 1977, things, in my opinion, were totally out-of-control. Most of the patients seemed to have some type of insurance and they were encouraged to use it freely.

Since the health cost spiral had not been going on long enough, most people saw only their portion of the elephant and thought that since they had prepaid a fixed amount, the more services they consumed for that amount the better the deal they were getting.

Physicians, on the other hand, not only stood to benefit economically by providing more services, but also were generally trained to be as thorough as possible to achieve the appropriate diagnosis and treatment without much emphasis on the economic consequences. There were a lot of physicians that used health care dollars excessively for the sake of being thorough. There were also a few that used excessive health care dollars for the sake of personal enrichment. I have been told that it was a rare physician that unethically profited from the health insurance system. A rare disease to me is something that I will either never see or see only once or twice in my lifetime. By that standard, physicians who were unethically milking the system to enrich their own personal income were not a rare disease of the health care system. Physicians who spent very little time with their patients and ordered a lot of tests were rewarded much more richly than those who spent a lot of time with the patient and ordered a few tests.

Why didn't we police ourselves better? Because it was very hard. Most of us felt that it was a full time job just minding our own business and making sure that our own individual performance was up to proper standards without trying to look over somebody else's shoulder. We all recognized, as we still do, that each individual case involves a lot of judgement. All of

us on utilization review committees found that we had the experience of questioning another physician's motives, only to find that, if we looked a little deeper, physicians usually had good justification for their actions. Utilization review boards typically had very little power to do anything more than just make recommendations. Regulatory bodies were similarly weak. There was the knowledge that if one were indeed dealing with an unethical physician, disciplinary action could be hazardous to your health since, through a lawsuit, that person could make your life miserable, perhaps for many years.

What is the point of all this discussion? The term managed care has been used so frequently and by so many different groups of people that it has become difficult to define. I have therefore chosen to approach this problem by describing the opposite of managed care and that would be of course unmanaged care. To me unmanaged care as described above means the practice of medicine and the delivery of health care without regard to the economic consequences or, worse yet, delivery of health care for the primary purpose of economic gain rather than for the primary goal of achieving the patients' improved and sustained good health.

There is a lot of resistance to the idea of managed care and I think it is appropriate that many of the short-term consequences of managed care should be disdained by physicians. The problems of access to care, loss of individuals'

I think that we are involved in a positive movement. I believe that we are going through the painful struggle of creating what will be a better system of health care delivery.

MANAGED CARE

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choice of physician, increased red tape, decision-making by inadequately trained and improperly motivated individuals, and the all too frequent imposition of an adversarial relationship between the physician and patient, are all bad things. But are these indications that we are indeed headed in the wrong direction? Should we be striving for a return to the "unmanaged care" of the 1970s or clear back to the days when there was no insurance at all? I think not. I think that we are involved in a positive movement. I believe that we are going through the painful struggle of creating what will be a better system of health care delivery. We must solve the problems of access to care. We must learn how to deal with the fact that we cannot afford to do everything we would like to do for our patients. We must face the fact that although we provide a vital service we are not so important that we should be offended when people have concerns about how much we cost. Most importantly, I believe we should strive toward a system which does what the original totally private paid doctor-relationship did accomplish so well, motivate the patients as well as the providers to take a positive but practical approach to solving health care problems. We need a system that recognizes that although access to health care may be considered a right, health care itself is a service that has a cost and therefore cannot be unlimited.

If you are going to take a trip it is better to select a difficult road with a correct destination rather than an easy road that takes you to the wrong place. If we as physicians take the role of passengers on this trip through the evolution of managed care, not giving directions, but just griping about the

bumps and bruises we are receiving, and wishing we could go back to where we started, we could wind up with the worst of both worlds, a difficult road to the wrong destination. We need to get in the driver's seat on this trip while we still can, although at times we may have to accept some of the guidance and advice of others. We should take an active part in establishing a vision of the future of health care delivery, cast our eyes forward, not backward and keep moving toward the goal. **RMS**

Geriatric Journal Club

Donald L Courtney, MD

Effects of Estrogen or Estrogen/Progestin Regimens on Heart Disease Risk Factors in Postmenopausal Women. The Postmenopausal Estrogen/Progestin Interventions (PEPI) Trial Writing Group. JAMA, 273:199-208, 1995

THIS IS A RANDOMIZED, PROSPECTIVE study of four different regimens of estrogen, given to post-menopausal women with no contraindications to estrogen or progesterone therapy. The intent of the study is to determine the impact of the different regimens on several risk factors for heart disease. The need for this information is pressing; the incidence of heart disease rises sharply in the post-menopausal period. While estrogens appear to reduce the risk of heart disease, the use of unopposed estrogen places the woman at higher risk of endometrial cancer, but has appeared to reduce the benefit of estrogens on cardiovascular risk factors.

The study enrolled 875 women at seven sites. Subjects were between 45 and 64 years of age, their last menstrual period was one to 10 years prior to enrollment (greater than two months if the patient was surgically menopausal), and all were in good health. Baseline mammography and endometrial biopsies were performed on all subjects.

Subjects were randomized to one of five regimens: placebo, conjugated equine estrogen (Premarin) 0.625 mg/day [CEE], CEE plus medroxyprogesterone acetate (Provera) 10 mg/day for the first 12 days of a 28-day cycle [CEE+cyclic MEA], CEE plus MEA 2.5 mg/day continuously [CEE+cont MEA], or CEE plus micronized progesterone 200 mg/day for the first 12 days of a 28-day cycle [CEE+MP].

Patients were followed for three years. Attendance at follow-up appointments was 95 percent or better in all groups. Women in all groups were similar: the average age at enrollment was 56 years, about 90 percent of the subjects were white, about two-thirds were married, about one third had undergone hysterectomy.

RESULTS

Lipoproteins: Probably half of the cardioprotective effect of estrogens is their ability to raise the HDL-cholesterol. In this study, all estrogen protocols were associated with an increase in

HDL-C over placebo. CEE alone and CEE+MP had the greatest increase in HDL-C. LDL-Cholesterol fell in all groups treated with estrogen regimens.

Triglyceride levels increased in all active treatment groups in this study. This is consistent with known effects of estrogen to increase triglyceride production. Although the authors of this study suggest that this increase in triglyceride production may not be atherogenic, the evidence to support this conclusion is not available.

Blood pressure: In this study, blood pressures were not different between the different groups over the course of the study.

Glucose and insulin: Fasting glucose levels decreased in subjects receiving active treatment, compared with placebo. This was

accompanied by a decrease in plasma insulin levels in the treatment groups, confirming previous work that demonstrates estrogens have a beneficial effect on insulin resistance. Women on either of the MPA regimens had an increase in the two-hour glucose, suggesting glucose intolerance. It is reasonable to conclude that there is no net increase in diabetes on any study regimen, and that only MPA has an association with worsened glucose tolerance.

Increased thrombogenesis: Fibrinogen levels were measured serially during the study. There was a small, but significant reduction in fibrinogen levels for patients on active treatment.

Weight and waist-hip ratio: All groups had a net gain in weight; the greatest gain was in the placebo group, and the least weight gain among women with unopposed CEE. The waist-hip ratio increased in all groups, without

While estrogens appear to reduce the risk of heart disease, the use of unopposed estrogen places the woman at higher risk of endometrial cancer, but has appeared to reduce the benefit of estrogens on cardiovascular risk factors.

GERIATRIC JOURNAL CLUB

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significant differences.

There were a large number of dropouts in the placebo and CEE groups. This reflected a higher rate of adverse events. Forty-one of 170 women receiving CEE had adenomatous or atypical hyperplasia requiring treatment. Half of all hysterectomies (seven of 14) were performed on subjects in the CEE group. There were no significant differences between groups in the rates of cancer or cardiovascular events. The difference in outcomes will be the subject of the next large prospective study of estrogens to be reported (the Women's Health Initiative, to be completed in 2000 or 2001).

COMMENTS

The PEPI trial answers a lot of questions that previous, non-randomized trials had not answered. The benefits of hormone replacement therapy are not all due to a selection bias of healthier women requesting estrogens (an issue that has confounded previous observational studies). Hormone therapy in current low doses does not increase clotting factors, nor does it adversely affect blood pressure or weight. The effect of hormone replacement on glucose and insulin is more complex and will need further study, but for now the practitioner can advise patients that treatment with CEE+MP does not worsen glucose tolerance.

The effect of hormone replacement therapy on lipoproteins is the most complex. CEE produces a beneficial effect on HDL-cholesterol (5.6 mg/dl increase). This effect is blunted by progestins, more so with MPA (1.2 and 1.6 mg/dl) than MP (4.1 mg/dl). All regimens lowered LDL-cholesterol by about 15 mg/dl. Triglycerides rose in all treatment groups by about 13 mg/dl. Theoretically, the overall changes in lipoproteins should produce a significant reduction in cardiovascular deaths.

CHANGING YOUR PRACTICE

There are certain groups of patients where the use of estrogens is controversial; these patients were not included in the PEPI study. At this time, it is unclear whether to provide estrogens to women with a history of stroke or heart disease. Estrogen therapy is contraindicated in women with a history of breast cancer, endometrial cancer or hypertriglyceridemia. In the absence of these conditions, women should be placed on estrogens near the time of menopause. This will produce

reductions in osteoporosis, and likely reduce cardiovascular deaths as well. Although CEE+MPA (Premarin+Provera) would be least expensive, it appears that CEE+MP may have the greatest benefit on cardiovascular risk. At present, there is no commercially available preparation of micronized progesterone, but 28-day blister packs of CEE+Micronized Progesterone should be available by the time this reaches print. All patients on hormone replacement therapy should be followed with annual exams as outlined in the study.

As the accompanying editorial in *JAMA* (273:240-241, 1995) pointed out, current work showing benefits of hormone therapy reducing the risk of depression, memory loss, and a range of cancers shows a compelling need for increased, but careful use. **MS**

Dr. Donald L. Courtney is the Chief of Geriatric Medicine at the Dwight G. Eisenhower V.A. Medical Center in Leavenworth, and an Assistant Professor of Medicine with the Center on Aging at the University of Kansas Medical Center.

Escherichia coli O157:H7 infections in Kansas, 1994-1995

BACKGROUND

AT LEAST FIVE GROUPS of *Escherichia coli* (EC) bacteria cause enteric illness: enterotoxigenic EC, enteropathogenic EC, enteroadherent EC, enteroinvasive EC, and enterohemorrhagic EC. These bacteria can cause a broad spectrum of disease, ranging from travelers' diarrhea to dysentery-like disease, to Hemolytic Uremic Syndrome (HUS). Each group of EC operates through a different mechanism and has slightly different symptoms.¹ Enterohemorrhagic EC type O157:H7 was recommended to be included in the list of reportable diseases by the Council of State and Territorial Epidemiologists in 1994 and is the focus of this article.

EC O157:H7 became known as a human pathogen in 1982 and was the cause of a widely known large outbreak of illness associated with hamburger consumption at a fast-food restaurant chain in 1991.² Between January 1, 1993 and September 14, 1995, 63 outbreaks of EC O157:H7 were reported from all regions of the country to the Centers for Disease Control and Prevention (CDC). Because EC O157:H7 is currently reportable in only 38 states and because only 54 percent of all clinical laboratories routinely screen bloody stools for EC O157:H7, it is believed to be a widely underreported infection.³ One outbreak of EC O157:H7 in northeast Kansas was investigated by the Office for Epidemiologic Services and local health departments in the fall of 1995. EC O157:H7 became a reportable disease in Kansas in January, 1996.

REPORTED CASES IN KANSAS

Prior to becoming a reportable disease, 59 EC O157:H7 infections with onset in 1994 and 1995 among Kansas residents were reported to the Office for Epidemiologic Services. The 1994 incidence rate of EC O157:H7 in Kansas was .92/100,000; and the 1995 incidence rate in Kansas was 1.45/100,000. The increase in reported cases is most likely due to an increase in the number of laboratories testing for EC O157:H7 and increased medical interest in infection detection and surveillance.

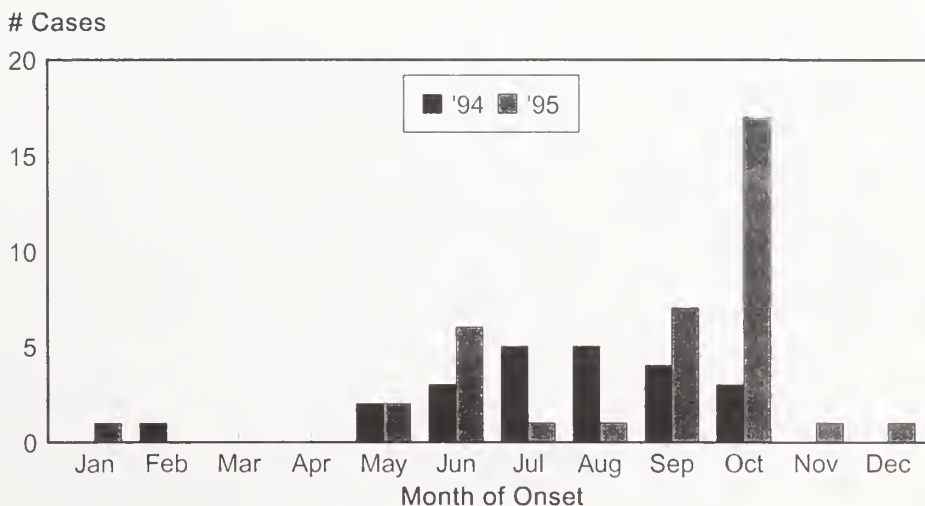
Age Distribution: The mean age of reported cases for both years combined was 25 years, with a range of 1-91 years. The incidence rate for children under five years old was almost four-times higher than that for older Kansans: 6.4/100,000 for 1994-95, compared to 1.7/100,000. This may be due to increased case finding and reporting in

the youngest age group, in part because severe complications such as HUS are more likely to occur among young children, which increases the likelihood of detecting EC O157:H7 infection.

Seasonal Variation: Reported EC O157:H7 infections in Kansas exhibit a seasonal trend, with an increase in the summer/fall (Figure 1). This trend has been seen elsewhere and has been hypothesized to be related to increased exposure to undercooked beef and seasonal trends in the availability of fresh vegetables, fruits, and their products (e.g. unpasteurized apple cider), which can be sources of infection.

The large peak in cases in October 1995 was partially due to a point-source outbreak of EC O157:H7 infections after a wedding reception. The implicated food in that outbreak was mandarin orange punch and it is possible that a symptomatic food handler accidentally contaminated the punch.

Figure 1: Reported *E. coli* O157:H7 Infections, 1994-1995, Kansas



ESCHERICHIA COLI 0157:H7

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HEALTH CARE PROVIDER ROLE IN EC O157:H7 DETECTION AND PREVENTION

By suspecting and confirming EC O157:H7 infection, health care providers have an essential role in the investigation and control of outbreaks. The October 1995 outbreak investigation in Kansas also identified a missed opportunity to detect EC O157:H7 by stool culture: case (later confirmed through serological tests) provided bloody stool samples at two visits within a week of the wedding reception to a hospital emergency room but neither sample was tested for EC O157:H7. Many laboratories, including the Kansas Health and Environment Laboratory, will test for EC O157:H7 infection only upon specific request. It is essential, therefore, that physicians request the test in the presence of clinical suspicion of EC O157:H7 infection. The ability of a laboratory to detect EC O157:H7 from stool samples is enhanced when samples are collected in the early phase of infection. County health departments can assist with stool sampling and shipment to the Kansas Health and Environment Laboratory (KHEL) when EC O157:H7 is a potential cause of illness. Patients with diarrhea should be reminded to refrain from food preparation for others, especially outside the immediate family, and counseled to frequently wash hands with soap for at least 20 seconds, scrubbing underneath the fingernails. The skins of raw fruit should be washed thoroughly and kitchen countertops should be washed with soap after raw food has been present. The KDHE fact sheet on EC O157:H7 infection (page 33) may be copied and used for patient education. **KMS**

EDITORIAL NOTE

Both cryptosporidiosis and EC O157:H7 became reportable diseases in Kansas on January 1, 1996. Outbreaks of these diseases can be prevented by appropriate food handling and hygiene practices, both of which can be influenced by health care providers' education of all patients.

This article was submitted by the Office for Epidemiologic Services, Kansas Department of Health and Environment (KDHE).



***E. coli* O157:H7 Infection**

FACT SHEET

What is *E. coli* O157:H7?

There are many strains of bacteria named *Escherichia coli*, and most are normally present in human and animal intestines. The strain, *E. coli* O157:H7 is of special importance, however, because it can cause a variety of illness ranging from mild diarrhea to bloody stools and kidney failure, and may even result in death.

Who gets *E. coli* O157:H7?

Anyone may become infected, although children and the elderly are at a greater risk for the more severe complications of infection. Major sources of infection are undercooked ground beef and raw milk. Manure-contaminated fruits and vegetables can also be sources of infection.

What are the symptoms of *E. coli* O157:H7?

Diarrhea, sometimes bloody, is the most common symptom of *E. coli* O157:H7 infection. Abdominal cramps and vomiting are also symptoms of infection. Because these symptoms are common to a number of illnesses besides *E. coli* O157:H7 infection, it is important to have a stool sample tested for the presence of the bacteria early after the symptoms begin. A physician or local health department can arrange to have stool testing done.

How soon do symptoms appear?

Generally, symptoms begin 3-4 days after infection.

For how long is a person able to spread *E. coli* O157:H7?

While children can spread disease for up to 3 weeks, adults typically shed the bacteria for one week.

What is the treatment for *E. coli* O157:H7?

Antibiotics are used only in severe cases or to treat complications. If dehydration occurs, fluid replacement may be needed.

What can a person do to minimize the spread of *E. coli* O157:H7?

Infection can be prevented if ground beef is cooked until the pink is gone. Fruits and vegetables should be thoroughly cleaned before eating. Pasteurization kills bacteria in milk or apple cider. When someone develops *E. coli* O157:H7 infection, frequent handwashing with soap for at least 20 seconds, making sure to clean under the fingernails, will reduce the risk of spreading infection. Supervised handwashing of young children is important. Infected children in day care or food handlers should not return to their usual activities until two stool samples are negative for *E. coli* O157:H7.

Delegate's report from the AMA House of Delegates Interim Meeting

THE AMA HOUSE OF DELEGATES MET IN ATLANTA, DECEMBER 8-11, 1996. AT THE OPENING Session there were 426 delegates seated representing every state and territory and also virtually every national specialty society.

GOVERNANCE

The House adopted recommendations in a report of a Special Committee that provides for four-year terms with a maximum tenure of eight years. This is a change from the previous provisions of three three-year terms for a maximum tenure of nine years.

At the same time the House rejected proposals of the Special Committee that would expand the size of the Board by providing "slotted seats" to specified specialty categories and large group practices.

The House also voted to establish a new Section for International Medical Graduates (IMG). The Reference Committee noted the contributions of IMG's to medicine and the strong need and desire for a Section as an appropriate response to a growing segment of the physician population with special concerns. The committee also noted that there was potential for AMA membership growth among IMG's.

AMERICAN MEDICAL ACCREDITATION PROGRAM (AMAP)

The House considered a Board report and three resolutions on the implementation of AMA's new program for setting standards for practicing physicians, called the American Medical Accreditation Program (AMAP). This program was developed in response to previous House actions calling on the AMA to "...support development of standardized criteria to be used in managed care contracts for reviewing physicians' office and medical records in order to avoid multiple review."

The Board detailed the extensive outreach conducted with the Federation since the 1996 Annual Meeting and believes the response from the Federation also reflects the spirit of

professional unity demonstrated in the action calling for promoting trust and cooperation throughout the Federation.

The Reference Committee reported that it heard testimony stressing the need to consolidate credentialing and physician office site review and supporting the AMAP program as a mechanism through which the Federation can work together to achieve this result.

The Reference Committee was assured that AMAP will employ the Federation concept and network with state, county, and specialty medical societies existing credential verification services and with commercial vendors who collaborate with Federation organizations.

The Reference Committee also reported that it heard testimony stressing the need to proceed without delay because of the pressing need of physicians for a consolidated effort in credentialing and physician office site review. Commercial vendors, HMO groups and others are beginning to or will soon develop their own verification programs. These efforts often proceed with little physician input.

The House approved as amended the recommendations in the Board report as follows:

1. That the AMA continue implementation of the American Medical Accreditation Program.
2. That periodic progress reports be disseminated to the Federation, and that the House of Delegates receive a progress report at each Annual and Interim Meeting.
3. That as AMAP implementation proceeds, the Board of Trustees continue to include Federation (county, state and specialty medical societies) and related organizations in every phase, including, appointment to the Governing Body; defining roles for each Federation component on the Advisory Committees; and the formation of partnerships with appropriate Federation organizations in each of the five components of AMAP.

HIV COUNSELING & TESTING FOR PREGNANT WOMEN

After much debate in the Reference Committee and on the floor of the House of Delegates, the House voted to reaffirm existing policy on counseling and testing of pregnant women for HIV. The policy states: The AMA supports the position that there should be mandatory HIV testing of all pregnant women and newborns with counseling and recommendations for

appropriate treatment.

In a related action the House adopted a substitute resolution that states: That physicians and other health care providers who are principally responsible for the prenatal care and delivery have a mandatory responsibility to provide information and counseling to pregnant women about the risk of vertical transmission of HIV and the benefits of treatment and a responsibility to document such counseling, testing and treatment results.

Many AMA policies and programs began with an individual physician who had a good idea and coaxed it through the democratic process.

TERMINATION OF LATE TERM PREGNANCIES

The Reference Committee reported that it heard extensive and passionate testimony on two resolutions opposing the termination of late term pregnancies. The committee noted that this issue is also related to the importance of the physician-patient relationship and the belief that governmental interference into the practice of medicine is inappropriate and ultimately harmful to the patient.

The committee proposed a substitute resolution, believing that it is important for the Association to assist in providing the scientific and clinical expertise to establish standards of good medical practice. The committee believed that the political and judicial decisions that society must make should be based on good science and good medicine.

After much debate the House adopted the following substitute resolution: That the AMA Board of Trustees, in consultation with pertinent AMA Councils and medical specialty societies, undertake a study of which late term pregnancy termination techniques and circumstances conform to the "standards of good medical practice" as required by current policy, and that the AMA work with pertinent medical specialty organizations to develop appropriate clinical practice guidelines for late term pregnancy termination.

DELEGATE'S REPORT

Continued from page 35

FUNDING OF GRADUATE MEDICAL EDUCATION

The Council on Medical Education provided a comprehensive study of the options for financing graduate medical education. This report is in response to a growing perception that the United States is training through graduate medical education (GME) a number of physicians that are beyond national requirements and that the excess is not to the national benefit.

This is coupled with the need to reduce the number of GME positions funded by Medicare and to restructure Medicare to a sounder fiscal basis. Although the Federal Government is the major financial supporter of GME, it has little control over the numbers or the distribution of GME opportunities other than through financial support.

The Council offered eight recommendations that were adopted as amended:

1. That the AMA affirm and support current policy for a Federal system of financing Graduate Medical Education based on an all payer contribution.
2. That the AMA affirm and support current policy for a Federally authorized public/private sector planning initiative to monitor, guide and distribute the funding from the all payer fund consistent with the need to improve Medicare fiscal solvency and to respond to regional and specialty needs.
3. That the AMA support the establishment of an authorization system yet to be specified (for example, a voucher system) to provide funding for the training program at the site where training occurs.
4. That the AMA support the development of a portable authorization system for use by the U.S. medical graduates, recognizing that the MD/DO degree is only a mid-point of formal medical education.
5. That the AMA support establishment of an authorization system which guarantees funding for U.S. medical graduates and additional funding for international medical graduates on a competitive basis, based on limits set by the new public/private sector workforce planning group.
6. That the AMA support the development of alternative options for support of teaching hospitals to achieve fiscal stability with reductions in Medicare Indirect Medical Education Adjustment payments and to develop alternative

approaches to provide patient services previously provided by resident physicians.

7. That the AMA encourage the use of international assistance funds to provide for appropriate U.S. training for physicians from other countries to increase the level of medical care they would provide in their home countries.
8. That the AMA support efforts to allow completion of training of international medical graduates already in training who might be adversely affected by an authorization system.

PHYSICIAN WORKFORCE DEVELOPMENT

At the Interim Meeting the AMA served as host for a distinguished group of professional organizations to hold an open hearing on the issue of physician workforce. About 1,000 physicians attended this historic meeting. Sponsors included the American Association of Colleges of Osteopathic Medicine, the American Osteopathic Association, the Association of Academic Health Centers, the Association of American Medical Colleges, the Institute of Medicine, the National Medical Association, and the American Medical Association.

The objective of this hearing was to provide an opportunity to hear testimony from all interested parties, develop a consensus statement to reflect the common themes of agreement, and then provide the Federal Government the very best advice on this issue. In addition to the oral testimony, many organizations submitted written statements. Dr. Richard F. Corlin, Speaker of the House of Delegates, presided.

HEALTH SYSTEM REFORM

The House considered a report from the Council on Medical Service on employment-based health insurance plus a resolution sponsored by 13 state delegations entitled, "Individually Selected and Owned Health Insurance System Transformation."

The House amended the recommendations in the report calling on the AMA:

1. To place a high priority on implementation of current policy which supports equalizing the tax exemption of individually purchased health benefits with that of employer-based health benefits.
2. To continue to place a high priority on enactment of federal legislation to expand opportunities for employees

and others to individually own health insurance through vehicles such as medical savings accounts.

The House also adopted a substitute resolution that changed current AMA policy on this issue to read as follows:

1. Affirm its support for pluralism of health care delivery systems and financing mechanisms in obtaining universal coverage and access to health care services.
2. Actively support the principle of the individual's right to select his/her health insurance plan and actively support ways in which the concept of individually selected and individually owned health insurance can be appropriately integrated, in a complementary position, into the Association's position on achieving universal coverage and access to health care services. To do this the AMA will:
 - a. Support legislation that would provide the employer with the same tax treatment for payment of health insurance premiums whether the employer provides the health insurance plan for the employee or whether the employer provides a financial contribution to the employee to purchase individually selected and individually owned health insurance.
 - b. Support the concept that the tax treatment would be the same as long as the employer's contribution toward the cost of the employee's health insurance is at least equivalent to the same dollar amount that the employer would pay when purchasing the employee's insurance directly.
 - c. Study the viability of provisions that would allow individual employees to opt out of group plans without jeopardizing the ability of the group to continue their employer sponsored group coverage.
 - d. Work toward establishment of safeguards, such as a health care voucher system, to ensure that contributions made to the employee for the purchase of individually selected and individually owned health insurance are used for that purpose.
 - e. To ensure that the health insurance plan purchased by the individual employee is sufficient to provide a basic level of health care

and does not increase the probability that the employee will become uninsured, the AMA would work toward the establishment of the following guidelines: (1) minimum benefit requirements, including catastrophic protection, (2) fiscal solvency of the plan, (3) provision of basic consumer information, (4) protection of the consumer from fraud, (5) guaranteed issue, (6) guaranteed renewability, and (7) rate reform.

The House also revised the policy to call on the AMA to support individually selected and individually owned health insurance as the preferred method for people to obtain health insurance coverage.

CONCLUSION

Limited space prevents comment on everything that was considered by the House of Delegates.

Meetings of the AMA House of Delegates are open to every member and are conducted in a most democratic manner. They provide those who attend a unique educational experience as a wealth of information is disseminated and discussed. Members may present testimony at the Reference Committee hearings and there are many other opportunities to get your views across.

If you cannot come to the meetings, let your delegation know your opinions and concerns.

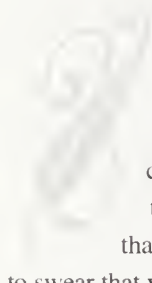
Many AMA policies and programs began with an individual physician who had a good idea and coaxed it through the democratic process. **MS**

Your delegation from Kansas includes:

Jimmie A. Gleason, MD, Topeka; *Delegate*
 Stephen F. Miller, MD, Parsons; *Delegate*
 Linda D. Warren, MD, Hanover; *Delegate*
 Kermit G. Wedel, MD, Minneapolis; *Delegate*
 Craig A. Concannon, MD, Beloit; *Alternate Delegate*
 Joseph C. Meek, Jr., MD, Wichita; *Alternate Delegate*
 Terry L. Poling, MD, Wichita; *Alternate Delegate*
 Roger D. Warren, MD, Hanover; *Alternate Delegate*

I testify in court

Arthur Hertzler, MD



MY TEACHING position brought me some autopsies and as a consequence demands to testify in court. I learned that the game is to cause you to swear that you will tell "the truth, the whole truth, and nothing but the truth," and then the lawyers battled to see to it that you did not do any of the three things you were under oath to do. But it was a lot of fun. Unfortunately for the lawyers, I was not so dumb and timid as I looked. I soon learned that if I played the smart game they played with me it was all right with the judge. One thing one could count on in the beginning of cross questioning: I never used any money I received as an expert witness for my own use. I gave all the fees to Mercy Hospital because I wanted to make sure I would never testify for money. It was a common practice with lawyers to make the jury feel that the medical expert was to receive a large fee: therefore, the testimony must, of necessity, be prejudiced. I would parry with the attorney as long as I could draw him out. Then I would offer to make a pact with him to give the hospital above mentioned the whole fee each of us received, adding quickly that it was my practice invariably to do so. Of course, an assistant lawyer

would move to "strike out, incompetent, irrelevant, and immaterial." But the jury got a laugh and somehow no lawyer seems to like to have a jury laugh at him. Lawyers have a small sense of humor.

One instance may be mentioned. I was testifying in a notorious case. The opposing lawyer was a very able man, large of physique and positive of language. When he came to

cross-question me he walked near the witness stand and fairly bellowed his question. I looked at him calmly a moment and then placed my hand behind my ear and meekly said, "A little louder, please." Everybody bellowed with joy. The lawyer was so mad he sank in his chair and his assistant had to follow up the cross-questioning. The morning paper had a headline: "Prominent attorney did not scare the modest young doctor."

Another prominent attorney once became peeved at me for insisting that the nursery yarn of the cow jumped over the moon violated no rule of logic and was as plausible as the point he wished to establish: to wit, that a plump lady could produce a displacement of the

uterus by sitting down in the vestibule of a streetcar. The judge allowed us to wrangle quite awhile and then said to the lawyer: "You asked the question and I would suggest you allow the doctor to answer it, as he seems determined to.

*... there seem to be
doctors available for
testifying to anything
a lawyer may wish
them to do.*

And then we can all go home to supper." My idea was that in as much as I was not permitted by any lawyer to tell my part of the truth, I retaliated the best I could by keeping

him from establishing something that certainly was not true.

As I became busier I came to avoid court service as being too time consuming and the labor of avoiding the traps of clever lawyers too exhausting. Besides, it is not particularly edifying to have the average jury ponder on the correctness of the conclusions of a medical witness. At the same time one cannot blame them, for there seem to be doctors available for testifying to anything a lawyer may wish them to do. **MS**

The Horse and Buggy Doctor was written by Arthur Hertzler, MD, a Halstead physician. It recounts the practice of medicine as it was during Hertzler's career. The piece is reprinted with permission from the Hertzler Foundation.



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A moment of silence . . .

CLOVIS W BOWEN, MD

Dr. Bowen, 84, a Topeka general practitioner, died December 18, 1996.

He graduated from the University of Kansas School of Medicine in 1937. He was a flight surgeon in the Army Air Corps from 1942 to 1946. He practiced medicine in Topeka and Valley Falls.

Dr. Bowen married Helen Williams in 1938. She preceded him in death in 1989.

He served on the board of directors of Blue Cross and Blue Shield from 1968 to 1971. He was a member of the Shawnee County Medical Society where he served as president in 1959. He was also a member of First United Methodist Church and the Downtown Rotary Club.

CAROLINE C

BROWN-SANDERS, MD

Dr. Brown-Sanders, 84, a retired public health physician, died January 14, 1997 in Lee's Summit, Missouri.

Dr. Brown-Sanders was one of the first women graduates of the University of Kansas School of Medicine in 1936.

She married Dr. George E. Sanders in 1938. He preceded her in death in 1984.

Dr. Brown-Sanders was a member of Alpha Omega Alpha Honorary Medical Society and Alpha Epsilon Iota, Omicron Chapter Women's Medical Society. She served on a number of boards in Wyandotte and Clay County, Missouri and was assistant director of the Wyandotte County Health Department from 1961 until her retirement in 1972.

EDWIN WRAY ENDERS, MD

Dr. Enders, 93, a retired anesthesiologist at Providence and St. Margaret's hospitals in Kansas City, died September 21, 1996 in Shawnee Mission.

He graduated from the University of Kansas School of Medicine in 1936. He was a Major in the United States Army Medical Corps during World War II.

Dr. Ender married Marguerite Lebo in 1930. She preceded him in death in 1989.

He was a member of the Lenexa United Methodist Church and the KU Alumni Association.

WILLIAM S FAST, MD

Dr. Fast, 85, a retired Atchison family practitioner, died April 17, 1997 in Kansas City, Missouri.

He graduated from Creighton University, Omaha, Nebraska. He served as a physician in World War II. He served on inactive duty from 1947 to 1951 and was discharged as a Major, Medical Corps U.S. Army.

Dr. Fast married Jane Adele Poindexter in 1940. She survives.

He was a member of the Trinity Episcopal Church, Phi Gamma Delta fraternity, the Phi Rho Sigma Medical Fraternity, the Active Masonic Lodge #158 AF & AM, and he served on a number of boards in the Atchison area. He was the first physician to be a member of the Atchison Hospital Board of Directors.

ROBERT M FENTON, MD

Dr. Fenton, 76, a Garden City family physician, died September 29, 1996 in Garden City.

He graduated from the University of Kansas School of Medicine, in 1954. He served in the U.S. Army Air Corps with the 8th Air Force during World War II and was a POW for more than 18 months.

Dr. Fenton married Cathy Richards in 1979. She survives.

He was a member of First Christian Church and Rotary. He also served on various committees and boards in the community and taught photography at Garden City Community College.

EDWARD D FUNK, MD

Dr. Funk, 92, a Eudora retired anesthesiologist, died April 29, 1996.

He graduated from the University of Kansas School of Medicine and was a member of the Wyandotte Medical Society.

TED M GARDINER, MD

Dr. Gardiner, 48, a former Garden City pediatrician, died March 24, 1997 in Boulder Colorado.

He graduated from the University of Southern California School of Medicine in 1974.

Dr. Gardiner married Lynda Sherri Godber in 1972. She survives.

He was a member of the Order of the Arrow and Alpha Chi Sigma, Delta Upsilon. As a professional, he directed continuing medical education in Kansas and was a member of the American Academy of Pediatrics.

C B HARRIS JR, MD

Dr. Harris, 79, a retired family practitioner, died November 17, 1996.

He practiced in the Garnett area for many years. He served with the U.S. Army during World War II.

Dr. Harris married Donna B. Rewerts in 1941. She preceded him in death in 1994.

He was a member of First Methodist Church, Delphian Lodge No. 44, AF & A M, the American Legion, Anderson County Medical Society, Trinity Lutheran Hospital Board of Directors, and the Kansas Historical Society.

LAWRENCE "LARRY" HART SR, MD

Dr. Hart, 64, a retired family practitioner, died December 24, 1996 in Atchison.

He graduated from the University of Kansas School of Medicine in 1964. He was a Navy veteran. He served as the sports team doctor for Maur Hill High School and Benedictine College.

Dr. Hart's wife, Joanne, survives.

He was a member of the Atchison Medical Society, Knights of Columbus, Elks Lodge, and was active with various other organizations in the Atchison area. He was the recipient of the Kansas Monk Award from Benedictine College.

ROBERT G HEASTY, MD

Dr. Heasty, 85, a Manhattan obstetrician and gynecologist, died March 17, 1997 in Manhattan.

He graduated from New York University School of Medicine in 1938. He moved to Manhattan in 1946 and was the first obstetrics-gynecology physician in Manhattan. He served in the Air Force during World War II.

Dr. Heasty married Harriet Allen in 1939. She preceded him in death in 1993.

He served as president of the Riley County Medical Society and one term as president of the Kansas Obstetrical Society. He was a life fellow of the American College of Obstetrics and Gynecology and he served 30 years on the former Maternal Health Committee of the Kansas Medical Society.

F W HUSTON, MD

Dr. Huston, 90, a retired Winchester family physician, died February 13, 1997 in Winchester.

He graduated from Rush Medical College in 1933 and began his family practice in Winchester in 1934.

Dr. Huston married Zetta Grace McCoy in 1934. She preceded him in death in 1995.

He was a member of the American Academy of Family Physicians, the Reformed Presbyterian Church and the Lions Club.

A MOMENT OF SILENCE . . .

Continued from page 41

HIRAM "PENNY" JONES, MD

Dr. Jones, 90, a retired Lawrence surgeon, died January 26, 1997 in Lawrence.

He graduated from the University of Kansas in pre-med in 1928 and was graduated from Harvard University in 1931. He served as head of the orthopedic hospital in the African Theater of operations during World War II and his unit followed General George Patton through Africa, Italy and France.

Dr. Jones married Frances Carolyn Foulkes in 1933. She survives.

He was a team physician for the Lawrence High School football team for 28 years. He was a member of Alford-Clarke Post No. 852 of the Veterans of Foreign Wars, Dorsey-Liberty Post No. 14 of the American Legion, the Rotary Club, and the Big Blue Club.

WILLIAM A LEO, MD

Dr. Leo, 75, a retired emergency medicine physician, died December 1995.

He graduated from the University of Kansas School of Medicine.

FREDERICK MATASSARIN, MD

Dr. Matassarín, 82, a retired Wichita urologist, died October 29, 1996 in Wichita.

He earned his BS in medicine at the University of Kansas and his MD there in 1937. He spent five years in the military as chief of urology at Fort Benning, GA, and at a U.S. military hospital in England.

Dr. Matassarín's father, Dr. Leon Matassarín, and brother, Dr. Ben Matassarín, were also Wichita physicians.

JOHN F NIENSTEDT, MD

Dr. Nienstedt, 88, a retired Hartford obstetrician, died July 27, 1996 in Sun City, Arizona.

He graduated from the University of Kansas School of Medicine. He served as a Captain overseas in the U.S. Army Medical Corps during World War II.

Dr. Nienstedt's wife, Pauline Price, survives.

He was a member of the Lakeview United Methodist Church.

GEORGE W POGSON, MD

Dr. Pogson, 71, a retired internal medicine physician, died August 22, 1996 in Pittsburg.

He graduated from the University of Kansas School of Medicine in 1947. He served in the U.S. Navy V-12 Unit during World War II. He was a captain in the U.S. Army during the Korean Conflict, and was stationed at the Tokyo Army Hospital.

Dr. Pogson married Mary Estelle Miller in 1949. She survives.

He was a past president of the Crawford County Medical Society, chief of staff at Mt. Carmel Medical Center, a past member of the Mt. Carmel Trustees and a Fellow of the American College of Physicians. He was active in many civic and community organizations in the Pittsburg area as well as a member of First United Methodist Church.

VAUGHAN C PRICE, MD

Dr. Price, 91, a retired general surgeon, died February 19, 1997 in McPherson.

He practiced in McPherson for 62 years. He graduated from the University of Tennessee in 1929. He served in the U.S. Navy from 1942 to 1945.

Dr. Price served 40 years as the athletic physician at McPherson College. He was presented a Distinguished Service Award for his community service in 1986. He was a member of the Rotary Club and held the record for 44 years of perfect attendance.

DAVID M PUGH, MD

Dr. Pugh, 67, a Kansas City cardiologist, died March 11, 1997. He graduated from Yale University School of Medicine.

JAMES S REED, MD

Dr. Reed, 73, former Douglas County coroner, died March 20, 1997 in Lawrence.

He graduated from the University of Kansas School of Medicine in 1947. He entered the Navy during World War II and was commissioned in the Navy Medical Corps. He served as the physician for the crew of the Nautilus atomic submarine. Dr. Reed entered the foreign medical service of the United States State Department. He served as medical attaché for embassies and consulates in Vietnam, Nepal, Ethiopia, Kuwait, and Uruguay.

Dr. Reed married Pauline "Polly" Rankin in 1951. She survives.

J D SMITH, MD

Dr. Smith, 74, a retired Larned family physician, died November 12, 1996 in Salina.

Dr. Smith also practiced medicine in Santana for 10 years during the 1960s. He served in the U.S. Army during World War II.

Dr. Smith married Wilma Jean Cook in 1948. She preceded him in death in 1988. He married Helen Pfaff in 1991. She survives.

He was a member of the United Methodist Church of the Cross, the American Legion and the Veterans of Foreign Wars.

**CORNELIUS J P
SULLIVAN, MD**

Dr. Sullivan, 78, a retired Wichita obstetrician and gynecologist, died June 18, 1996 in Fishkill, New York.

He graduated from New York Medical College and established a practice in New York state. In 1975 he came to Wichita and established his obstetrical & gynecologic practice.

His wife Rita survives.

LAWRENCE E VINZANT, MD

Dr. VinZant, 85, a retired Wichita surgeon, died November 4, 1996 in Wichita.

He graduated from the University of Kansas School of Medicine. He served in the U.S. Navy from 1944 to 1946.

WILLIAM T WEST, MD

Dr. West, 72, retired Wichita obstetrician and gynecologist, died February 4, 1997.

His wife, Regina survives.

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